TO:

## Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

# REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

P.O. Box 1450 Alexandria, VA 22313-1450		ACTION REGARDING A PATENT OR TRADEMARK
		r 15 U.S.C. § 1116 you are hereby advised that a court action has been tern District of Texas - Marshall Texas on the following action involves 35 U.S.C. § 292.):
DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
2:22-cv-494	12/23/2022	Eastern District of Texas - Marshall Texas  DEFENDANT
PLAINTIFF Multimedia Technologie	Format m/d/yyyy s Pte. Ltd.	LG ELECTRONICS INC. and LG ELECTRONICS USA, INC.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
1 9,055,254	06/09/2015	Multimedia Technologies Pte. Ltd
2 9,237,291	01/12/2016	Multimedia Technologies Pte. Ltd
3 9,232,168	01/05/2016	Multimedia Technologies Pte. Ltd
4 9,247,174	01/26/2016	Multimedia Technologies Pte. Ltd
5 9,510,040	11/29/2016	Multimedia Technologies Pte. Ltd
	In the above—entitled case, the INCLUDED BY	the following patent(s)/ trademark(s) have been included:
DATE INCLUDED	Ап	mendment
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
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In the abo	we—entitled case, the following	ng decision has been rendered or judgement issued:
DECISION/JUDGEMENT		
CLERK	(B	BY) DEPUTY CLERK DATE

#### Continued from page 1:

PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
6. 9,578,384	02/21/2017	Multimedia Technologies Pte. Ltd
7. 9,820,003	11/14/2017	Multimedia Technologies Pte. Ltd
8. 10,419,805	09/17/2019	Multimedia Technologies Pte. Ltd
9. 9,426,527	08/23/2016	Multimedia Technologies Pte. Ltd
10. 9,055,255	06/09/2015	Multimedia Technologies Pte. Ltd
11. 9,185,325	11/10/2015	Multimedia Technologies Pte. Ltd

## Mail Stop 8

# REPORT ON THE

Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450		FILING OR DETERMIN ACTION REGARDING TRADEMA	A PATENT OR	
In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § filed in the U.S. District Court  ☐ Trademarks or		TERN DISTRICT OF TEXAS	on the following	
DOCKET NO. 23-cv-00060	DATE FILED 2/17/2023	U.S. DI	STRICT COURT FOR THE EASTERN DISTRIC	T OF TEXAS
PLAINTIFF Touchstream Techno	ologies, Inc.		DEFENDANT Altice USA, Inc.; Cequel Col CSC Holdings, LLC; and Fri- Texas, Inc.	mmunications, LLC; endship Cable of
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK		HOLDER OF PATENT OR TR	ADEMARK
1 8,356,251	1/15/2013	Touc	hstream Technologies, Inc.	-
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1	In the above—entitled case, the	following	patent(s)/ trademark(s) have been included:	
DATE INCLUDED	INCLUDED BY		☐ Answer ☐ Cross Bill	☐ Other Pleading
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK		HOLDER OF PATENT OR TRA	ADEMARK
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In the above—entitled case, the following decision has been rendered or judgement issued:				
DECISION/JUDGEMENT				
CLERK	(BY)	DEPUTY	CLERK	DATE

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

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TO:

### Mail Stop 8 Director of the U.S. Patent and Trademark Office

### REPORT ON THE FILING OR DETERMINATION OF AN

P.O. Box 1450 Alexandria, VA 22313-1450		ACTION REGARDING A PATENT OR TRADEMARK	
filed in the U.S. Distr		ern District	1116 you are hereby advised that a court action has been of Texas, Marshall Division on the following s 35 U.S.C. § 292.):
DOCKET NO. 2:22-cv-367	DATE FILED 3/13/2023	U.S. DI	STRICT COURT Eastern District of Texas, Marshall Division
PLAINTIFF Seungman Kim	3/13/2023		DEFENDANT Samsung Electronics Co., Ltd., Samsung Electronics America, Inc.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK		HOLDER OF PATENT OR TRADEMARK
1 US 11,553,072	1/10/2023	Seu	ngman Kim
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DATE INCLUDED	INCLUDED BY	ne following	patent(s)/ trademark(s) have been included:  Answer Cross Bill Other Pleading
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#### Continued from page 1:

PATENT OR TRADEMARK	DATE OF PATENT OR	HOLDER OF PATENT OR
NO.	TRADEMARK	TRADEMARK
6. 10,419,805	11/14/2017	Multimedia Technologies Pte. Ltd.
7. 9,215,393	12/15/2015	Multimedia Technologies Pte. Ltd.
8. 9,426,527	08/23/2016	Multimedia Technologies Pte. Ltd.
9. 9,077,928	7/7/2015	Multimedia Technologies Pte. Ltd.
10. 9,185,325	11/10/2015	Multimedia Technologies Pte. Ltd.

#### AO 120 (Rev. 08/10) Mail Stop 8 REPORT ON THE TO: Director of the U.S. Patent and Trademark Office FILING OR DETERMINATION OF AN

P.O. Box 1450 Alexandria, VA 22313-1450			ACTION REGARDING TRADEM	- · · · · · · · · · · · · · ·
		of Texas - Marshall Division	t action has been on the following	
	✓ Patents. (  the patent action			
DOCKET NO. 2:23-cv-124	DATE FILED 3/24/2023	U.S. DI	STRICT COURT Eastern District of Texas - M	arshall Division
PLAINTIFF			DEFENDANT	
Multimedia Technologio	es Pte, Ltd.		Vizio Inc.	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK		HOLDER OF PATENT OR T	RADEMARK
1 9,055,255	6/9/2015	Multi	media Technologies Pte. Ltd.	
2 9,232,168	1/5/2016	Multi	media Technologies Pte. Ltd.	
3 9,247,174	1/26/2016	Multi	media Technologies Pte. Ltd.	
4 9,510,040	11/29/2016	Multi	media Technologies Pte. Ltd.	
5 9,578,384	2/21/2017	Multimedia Technologies Pte. Ltd.		
	In the above—entitled case, the	following	patent(s)/ trademark(s) have been include	d
DATE INCLUDED	INCLUDED BY	Tonoe	patentis, materialitis, nave oven metado	u.
PATENT OR	DATE OF PATENT	ndment	Answer Cross Bill	Other Pleading
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DECISION/JUDGEMENT	ve—elittled case, tile following u-	lecision nas	s been rendered or judgement issued:	
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# Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

#### REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

P.O. Box 1450 Alexandria, VA 22313-1450			ACTION REGARDING A TRADEMAR	
		rn District of Texas	ion has been on the following	
☐ Trademarks or ☑	☐ Trademarks or ☐ Patents. (☐ the patent action involves 35 U.S.C. § 292.):			
DOCKET NO.	DATE FILED 4/5/2023	U.S. DE	STRICT COURT  Western District of Tex	as
PLAINTIFF	•		DEFENDANT	
Ozmo Licensing LLC			TCL Electronics Holdings Ltd. and TCL Industries Holdings Co., Ltd.	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK		HOLDER OF PATENT OR TRA	DEMARK
1 9,264,991	2/16/2016	Ozm	o Licensing LLC	
2 10,873,906	12/22/2020	Ozm	o Licensing LLC	
3 8,599,814	12/3/2013	Ozm	o Licensing LLC	
4 11,012,934	5/18/2021	Ozm	o Licensing LLC	
5 11,122,504	9/14/2021	Ozm	o Licensing LLC	
DATE INCLUDED	INCLUDED BY	the following	patent(s)/ trademark(s) have been included:	Other Pleading
PATENT OR	DATE OF PATENT HOLDER OF PATENT OR TRADEMARK		7	
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	e entitled case, the following	ng decision h	is been rendered or judgement issued:	
DECISION/JUDGEMENT				
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TO:

## Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

## REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

P.O. Box 1450 Alexandria, VA 22313-1450			ACTION REGARDING A PATENT OR TRADEMARK
filed in the U.S. District Court West		Weste	1116 you are hereby advised that a court action has been ern District of Texas on the following
Trademarks or	Z Patents. (  the patent ac		
DOCKET NO 6:23-cv-249	DATE FILED 4/5/2023	U.S. DI	STRICT COURT Western District of Texas
PLAINTIFF			DEFENDANT
Ozmo Licensing LLC			TCL Electronics Holdings Ltd. and TCL Industries Holdings Co., Ltd.
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK		HOLDER OF PATENT OR TRADEMARK
1 9,264,991	2/16/2016	Ozm	no Licensing LLC
2 10,873,906	12/22/2020	Ozm	no Licensing LLC
3 8,599,814	12/3/2013	Ozm	no Licensing LLC
4 11,012,934	5/18/2021	Ozm	no Licensing LLC
5 11,122,504	22,504 9/14/2021 Ozmo Licensing LLC		io Licensing LLC
DATE INCLUDED	In the above—entitled case, th	e following	patent(s)/ trademark(s) have been included:
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PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK		HOLDER OF PATENT OR TRADEMARK
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## TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

#### REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

Alexai	ndria, VA 22313-1450	TRADEMARK
In Compliance	trict Court for	5 U.S.C. § 1116 you are hereby advised that a court action has been or the Western District of Texas on the following
	Patents. (  the patent action	
DOCKET NO.	DATE FILED	U.S. DISTRICT COURT
5:23-cv-387 PLAINTIFF	3/29/2023	for the Western District of Texas  DEFENDANT
RFC Lenders of Texas,	LLC	Global-View.net
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK
I 7,430,471	9/30/2008	RFC Lenders of Texas, LLC
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DATE INCLUDED	In the above—entitled case, the INCLUDED BY	following patent(s)/ trademark(s) have been included:
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# TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

# REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

Alexandria, VA 22313-1450		TRADEMARK		
		E DISTRICT OF DELAWARE		
DOCKET NO. TBD	DATE FILED 4/3/2023	S. DISTRICT COURT FOR THE DISTRICT (	OE DELAWARE	
PLAINTIFF	4/3/2023	DEFENDANT	OF DELAWARE	
INGENUS PHARMA	CEUTICALS, LLC, and LEIUTI S LLP	ACCORD HEALTHCARE, II	NC.	
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT (	OR TRADEMARK	
ı 10,993,952	5/4/2021	Leiutis Pharmaceuticals Pvt. Ltd.		
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	In the above—entitled case, the f	wing patent(s)/ trademark(s) have been inc	cluded:	
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DECISION/JUDGEMENT	sorte children older, and following on			
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## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 9,247,174 B2 Page 1 of 1

APPLICATION NO. : 13/968665

DATED : January 26, 2016

INVENTOR(S) : Sanjiv Sirpal et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title Page

In the Related U.S. Application Data at page 2, line 2, replace "61/736,962" with --61/736,692--therein.

Signed and Sealed this Fifth Day of July, 2016

Michelle K. Lee

Michelle K. Lee

Director of the United States Patent and Trademark Office

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Patent of: Serial No.: 13/968,665

Inventor(s): Sanjiv Sirpal et al. Filed: August 16, 2013

Patent No.: 9,247,174 Conf. No. 7370

Issued: January 26, 2016

Atty. File No.: 6583-488

Submitted via EFS-Web

Entitled: "PANEL USER INTERFACE FOR AN

INTELLIGENT TELEVISION"

Attn: Certificate of Corrections Branch

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

### REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT FOR PTO MISTAKE PURSUANT TO 37 C.F.R. § 1.322(a)

Dear Commissioner:

This Request for a Certificate of Correction of Patent for PTO Mistake is made pursuant to 37 C.F.R. § 1.322(a). Attached is Form PTO SB/44 containing the text of the correction which is requested herein. The error in the Abstract of the patent is a typographical error and support for the correction is in Domestic Benefit/National Stage Application section of the Application Data Sheet filed on July 11, 2014.

Respectfully submitted,

SHERIDAN ROSS P.C.

By: /Douglas W. Swartz/
Douglas W. Swartz
Registration No. 37739
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141

Date: May 23, 2016 (303) 863-9700

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. (Also Form PTO-1050)

#### UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

	CERTIFICATE OF CORRECTION	
		Page <u>1</u> of <u>1</u>
PATENT NO. :	9,247,174	
APPLICATION NO. :	13/968,665	
ISSUE DATE :	January 26, 2016	
INVENTOR(S) :	Sanjiv Sirpal, Mohammed Selim, Saulo Correia Dourado, and Alexa	nder de Paz
It is certified t Patent is hereby co	that an error appears or errors appear in the above-identified patent orrected as shown below:	and that said Letters
In the Abstract at p	page 2, line 2, replace "61/736,962" with61/736,692 therein.	

MAILING ADDRESS OF SENDER (Please do not use customer number below):

Sheridan Ross P.C. 1560 Broadway, Suite 1200 Denver, CO 80202-5141

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Acknowledgement Receipt		
EFS ID:	25861659	
Application Number:	13968665	
International Application Number:		
Confirmation Number:	7370	
Title of Invention:	PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION	
First Named Inventor/Applicant Name:	Sanjiv Sirpal	
Customer Number:	111285	
Filer:	Douglas W. Swartz/Amy Duarte	
Filer Authorized By:	Douglas W. Swartz	
Attorney Docket Number:	6583-488	
Receipt Date:	23-MAY-2016	
Filing Date:	16-AUG-2013	
Time Stamp:	20:25:10	
Application Type:	Utility under 35 USC 111(a)	

#### **Payment information:**

Submitted wi	th Payment		no						
File Listing:									
Document Number	Document Description		File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)			
1	Request for Certificate of Correction		3-488_Request-Certificate-	208941	no	2			
'	nequest for certificate of correction		Correction.pdf	b9bab38f80065ce9458b3a3276e5928701d 342a4	110				
Warnings:		•							
Information:									

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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

#### **New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



#### UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/968.665	01/26/2016	9247174	6583-488	7370

111285 7590

Sheridan Ross P.C. 1560 Broadway Suite 1200 Denver, CO 80202 01/06/2016

#### **ISSUE NOTIFICATION**

The projected patent number and issue date are specified above.

#### Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Flextronics AP, LLC, San Jose, CA; Sanjiv Sirpal, Oakville, CANADA; Mohammed Selim, Oakville, CANADA; Saulo Correia Dourado, Oakville, CANADA; Alexander de Paz, Burlington, CANADA;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit <u>SelectUSA.gov</u>.

IR103 (Rev. 10/09)

Complete if Known Substitute for form 1449/PTO 13/968,665 Application Number INFORMATION DISCLOSURE Filing Date August 16, 2013 STATEMENT BY APPLICANT First Named Inventor Sanjiv Sirpal (Use as many sheets as necessary) Art Unit 2421 Examiner Name James R. Marandi 6 Attorney Docket Number 6583-488 1 of Sheet

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-kind Code <sup>2 (if known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/J.M./	1	5734444	03/31/1998	Yoshinobo	
99999	2	6285804	09/04/2001	Crinon et al.	
	, 3	6493876 12/2002	12/10//202	DeFreese et al.	
e( <del>s) applic</del>	4	6515968	02/04/2003	Combar et al.	
ument,	5	7058600	06/06/2006	Combar et al.	
/	6	8566874	10/22/2013	Roberts et al.	
2015	7	8589981	11/19/2013	Lee et al.	
000000	8	8832742	09/09/2014	Rasanen et al.	
000000	9	2002/0042914	04/11/2002	Walker et al.	
000	10	2002/0052746	05/02/2002	Handelman	
900000	11	2003/0014752	01/16/2003	Zaslavsky et al.	
	12	2003/0149988	08/07/2003	Ellis et al.	
	13	2004/0078807	04/22/2004	Fries et al.	
	14	2004/0154040	08/05/2004	Ellis	
	15	2005/0097606	05/05/2005	Scott, III et al.	
8888	16	2005/0097622	05/05/2005	Zigmond et al.	
0000	17	2005/0120306	06/02/2005	Klassen et al.	
0000	18	2005/0204382	09/15/2005	Ellis et al.	
00000	19	2005/0204387	09/15/2005	Knudson et al.	
00000	20	2005/0229210	10/13/2005	Akhavan	
000	21	2006/0123445	06/08/2006	Sullivan et al.	
0000	22	2007/0066283	03/22/2007	Haar et al.	
0000	23	2007/0162936	07/12/2007	Stallings et al.	
XX	24	2008/0271080	10/30/2008	Gossweiler et al.	
00000	25	2008/0313677	12/18/2008	Lee	
000000	26	2009/0102966	04/23/2009	Jiang et al.	
000000	27	2009/0125940	05/14/2009	Kim et al.	
, , , , , , , , , , , , , , , , , , ,	28	2009/0165045	06/25/2009	Stallings et al.	
***************************************	29	2009/0199241	08/06/2009	Unger et al.	
	30	2009/0313232	12/17/2009	Tinsley et al.	
W	31	2010/0058231	03/04/2010	Duarte et al.	
/J.M./	32	2010/0128183	05/27/2010	Ishii	
Examiner Signature		/James Marandi/		Date Considered	05/02/2015

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M./

Sı	ubstitute for forr	n 1449/PTO		Complete if Known		
				Application Number	13/968,665	
IN	FORMA <sup>-</sup>	TION DISC	CLOSURE	Filing Date	August 16, 2013	
S	ГАТЕМЕ	NT BY AP	PLICANT	First Named Inventor	Sanjiv Sirpal	
	(Use as m	any sheets as ne	cessary)	Art Unit	2421	
				Examiner Name	James R Marandi	
Sheet	2	of	11	Attorney Docket Number	6583-488	

/J.M./	33	2003/0110234	06/12/2003	Egli et al.	
0000	34	2003/0151621	08/14/2003	McEvilly et al.	
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2.0 E∮aminer		/James Marandi	II.	Date	09/30/2014

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Complete if Known Substitute for form 1449/PTO Application Number 13/968,665 INFORMATION DISCLOSURE Filing Date August 16, 2013 STATEMENT BY APPLICANT First Named Inventor Sanjiv Sirpal (Use as many sheets as necessary) Art Unit 2421 Examiner Name James R. Marandi 4 Attorney Docket Number 6583-488 2 Sheet of 33 2009/0179989 07/16/2009 Bessone et al. 2009/0241048 09/24/2009 Augustine et al. 35 2010/0071019 03/18/2010 Blanchard et al. 36 2010/0107112 04/29/2010 Jennings et al. 37 2010/0122284 05/13/2010 Yoon et al. 38 2011/0022450 01/27/2011 Meredith 2011/0023608 02/03/2011 39 Rueger

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Examiner Initials*	No. <sup>1</sup>	Foreign Patent Document  Country Code <sup>3</sup> ; Number <sup>4</sup> ; Kind Code <sup>5</sup> ( <i>if known</i> )	Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>			

	NON-PATENT LITERATURE DOCUMENTS							
Examiner Initials*		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						
/J.M./		Official Action for U.S. Patent Application No. 13/969,846, mailed Aug. 15, 2014 (Attorney's Ref. No. 6583-426) 19 pages						
/J.M./	54	Official Action for U.S. Patent Application No. 13/969,869, mailed Sep. 16, 2014 (Attorney's Ref. No. 6583-428) 20 pages						

Examiner Signature /James Marandi/	Date Considered 05/02/2015
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not Patent Documents at <a href="https://www.usplo.gov">www.usplo.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO				Complete if Known			
			Applica	ation Number	13/968	,665	
<b>ORMA</b>	TION DISC	CLOSURE	Filing I	Filing Date Au		16, 2013	
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			Exami	ner Name	James	R Marandi	
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Examiner Signature		/James Marar	ndi/	Date Considered	09/30/2014

Signature | Considered |

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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.M./

Enter 12/16/2016 /JRM/

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of: Group Art Unit: 2421

SIRPAL et al. Confirmation No.: 7370

Serial No.: 13/968,665 Examiner: James R. Marandi

Filed: August 16, 2013

Atty. File No.: 6583-488

Entitled: "PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION"

Submitted Via EFS-Web
INTELLIGENT TELEVISION"

Mail Stop Issue Fee Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### AMENDMENT AFTER ALLOWANCE PURSUANT TO 37 CFR § 1.312

#### Dear Sir/Madam:

Applicants submit this Amendment After Allowance pursuant to 37 CFR § 1.312 in response to the Notice of Allowance and Fee(s) Due having a mailing date of September 4, 2015. An amendment may be entered after the mailing of a Notice of Allowance but prior to payment of the issue fee upon the recommendation of the primary examiner. Therefore, it is respectfully requested that the above-referenced application be amended as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks/Arguments begin on page 7 of this paper.



#### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/968,665	08/16/2013	Sanjiv Sirpal	6583-488	7370
111285 Sheridan Ross	7590 12/31/201 S P C	5	EXAM	IINER
1560 Broadwa Suite 1200			MARAND	I, JAMES R
Denver, CO 8	0202		ART UNIT	PAPER NUMBER
			2421	
			NOTIFICATION DATE	DELIVERY MODE
			12/31/2015	ELECTRONIC

#### Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com edocket@sheridanross.com

	T a	A 11						
	Application No.	Applicant(s)						
Response to Rule 312 Communication	13/968,665	SIRPAL ET AL.						
•	Examiner	Art Unit						
	James R. Marandi	2421						
The MAILING DATE of this communication ap	The MAILING DATE of this communication appears on the cover sheet with the correspondence address –							
1.  The amendment filed on <u>12/04/2015</u> under 37 CFR 1.312	2 has been considered, and has beer	n:						
a) 🔲 entered.								
b) $oxed{\boxtimes}$ entered as directed to matters of form not affecting	the scope of the invention.							
c)   disapproved because the amendment was filed after	er the payment of the issue fee.							
Any amendment filed after the date the issue fee and the required fee to withdraw the application		petition under 37 CFR 1.313(c)(1)						
d) disapproved. See explanation below.								
e) 🔲 entered in part. See explanation below.								
Specification and claims, as amedned, correct typographic	eal errors and do not change the scor	ne of the claims. As such the						
amendment is entered.	al enors and do not change the scop	e of the claims. As such, the						
/NATHAN FLYNN/	/James R Marandi/							
Supervisory Patent Examiner, Art Unit 2421	Examiner, Art Unit 2421							

U.S. Patent and Trademark Office PTOL-271 (Rev. 04-01)



#### UNITED STATES PATENT AND TRADEMARK OFFICE

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ELECTRONIC

12/14/2015

FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE 6583-488 7370 13/968,665 08/16/2013 Sanjiv Sirpal **EXAMINER** 12/14/2015 Sheridan Ross P.C. MARANDI, JAMES R 1560 Broadway PAPER NUMBER **ART UNIT** Suite 1200 Denver, CO 80202 2421 NOTIFICATION DATE **DELIVERY MODE** 

#### NOTICE OF NON-COMPLIANT INFORMATION DISCLOSURE STATEMENT

An Information Disclosure Statement (IDS) filed 12-84-2015 in the above-identified application fails to meet the requirements of 37 CFR 1.97(d) for the reason(s) specified below. Accordingly, the IDS will be placed in the file, but the information referred to therein has not been considered.

The IDS is not compliant with 37 CFR 1.97(d) because:

- The IDS lacks a statement as specified in 37 CFR 1.97(e).
- ☐ The IDS lacks the fee set forth in 37 CFR 1.17(p).
- ☐ The IDS was filed after the issue fee was paid. Applicant may wish to consider filing a petition to withdraw the application from issue under 37 CFR 1.313(c) to have the IDS considered. See MPEP 1308.

571-272-4200 or 1-888-786-0101 Application Assistance Unit Office of Data Management

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:

Sanjiv Sirpal

Serial No.: 13/968,665

Filed: August 16, 2013

Atty. File No.: 6583-488

Entitled: "PANEL USER INTERFACE FOR

AN INTELLIGENT TELEVISION"

Mail Stop Issue Fee Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Group Art Unit: 2421

Confirmation No.: 7370

Examiner: James R. Marandi

Submitted via EFS-Web

#### COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

Dear Commissioner:

Applicant submits these Comments on Statement of Reasons for Allowance to address further the Notice of Allowability ("Notice") having a mailing date of September 4, 2015.

In the Notice, the Examiner's stated reasons for allowance were that:

Claims 1, and 16 (and their respective dependent claims) are allowed. Claims 1 and 16 comprise a unique combination of elements that are not taught or suggested by the art of record, available to the Examiner at this time, when considering the claims as a whole.

Based on the Notice, the patentability of all other independent and dependent claims is assumed to be based upon the elements as set forth in such claims and that such claims meet all criteria for patentability under §101, §102, §103 and §112.

As is clear from MPEP 1302.14,

"The statement [of reasons for allowance] is not intended to necessarily state all the reasons for allowance or all the details why claims are allowed and should not be written to specifically or impliedly state that all the reasons for allowance are set forth."

While the above statement may be a stated reason for allowing some independent claims, Applicant submits that some independent claims may have a different reason for allowance and/or that some independent claims may have other reasons for allowance.

Specifically, the prior art fails to teach the following features of Claims 1 and 16:

1. A method for displaying content on a television, comprising:

receiving a first input via an input device associated with the television;

in response to the first input, displaying, via the television, an application panel interface;

determining content currently being shown on the television;

identifying at least one of a content source and content information associated with the content currently being displayed via the television;

based on the content and the at least one of the content source and the content information, providing a first content panel in the application panel interface, wherein the first content panel is a first type of application panel;

receiving a first directional input via the input device associated with the television;

determining, based on a first direction associated with the first directional input, a second content panel to display via the television in the application panel interface, wherein the second content panel is a second type of application panel;

retrieving, from memory, a second content information based on the second type of content panel; and

displaying, via the television, the second content information in the second content panel.

16. A system for displaying content on a television, comprising:

an input device associated with the television;

a memory; and

a microprocessor operable to:

receive a first input via an input device associated with the television:

in response to the first input, display, via the television, an application panel interface;

determine content currently being shown on the television;

identify at least one of a content source and content information associated with the content currently being displayed via the television;

based on the content and the at least one of the content source and the content information, provide a first content panel in the application panel interface, wherein the first content panel is a first type of application panel;

receive a first directional input via the input device associated with the television;

determine, based on a first direction associated with the first directional input, a content panel to display via the television in the application panel interface, wherein the second content panel is a second type of application panel;

retrieve, from memory, a second content information based on the second type of content panel; and

display, via the television, the second content information in the second content panel.

Although the Applicant believes that no fees are due for filing these Comments on Statement of Reasons for Allowance, please charge any fees deemed necessary to Deposit Account No. 19-1970.

Respectfully submitted,

SHERIDAN ROSS P.C.

By: \_\_\_/Douglas W. Swartz/

Douglas W. Swartz Registration No. 37739 1560 Broadway, Suite 1200 Denver, Colorado 80202-5141

(303) 863-9700

Date: Dec. 4, 2015

Electronic Acknowledgement Receipt			
EFS ID:	24265670		
Application Number:	13968665		
International Application Number:			
Confirmation Number:	7370		
Title of Invention:	PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION		
First Named Inventor/Applicant Name:	Sanjiv Sirpal		
Customer Number:	111285		
Filer:	Douglas W. Swartz/Theresa Brown		
Filer Authorized By:	Douglas W. Swartz		
Attorney Docket Number:	6583-488		
Receipt Date:	04-DEC-2015		
Filing Date:	16-AUG-2013		
Time Stamp:	13:43:53		
Application Type:	Utility under 35 USC 111(a)		

### **Payment information:**

Submitted with Payment			no			
File Listing:						
Document Number	Document Description		File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Post Allowance Communication -	Co	Comments_on_Reasons_for_Al	113004	no	3
' Incoming Iowance		lowance.pdf	e.pdf 59aec636686b73390a8095d40281d818193 a4459			
Warnings:						
Information:						

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

#### **New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Complete if Known Substitute for form 1449/PTO Application Number 13/968,665 INFORMATION DISCLOSURE Filing Date August 16, 2013 STATEMENT BY APPLICANT First Named Inventor Sanjiv Sirpal (Use as many sheets as necessary) Art Unit 2421 Examiner Name James R. Marandi Attorney Docket Number 6583-488 Sheet

	U.S. PATENT DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-kind Code <sup>2 (if known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	5933141	08/03/1999	Smith	
	2	6978473	12/20/2005	Nsonwu et al.	
	3	7152236	12/19/2006	Wugofski et al.	
	4	8352983	01/08/2013	Chane et al.	
	5	2002/0026637	02/28/2002	Markel et al.	
	6	2002/0188958	12/12/2002	Miller	
	7	2003/0070171	04/10/2003	Jeon et al.	
	8	2006/0117343	06/01/2006	Novak et al.	
	9	2008/0155613	06/26/2008	Benya et al.	
	10	2010/0037267	02/11/2010	Bennett	

	FOREIGN PATENT DOCUMENTS					
Examiner Initials*	No.1	Foreign Patent Document  Country Code <sup>3</sup> ; Number <sup>4</sup> ; Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>

	NON-PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No.1 Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or cour where published.				
	11	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/055294, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-450-PCT) 10 pages			
	12 International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/055296, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-451-PCT) 8 pages				
	13 International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US13/55493, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-452-PCT) 8 pages				
	14 International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US13/55509, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-481-PCT) 8 pages				
	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/055303, mailed Feb. 26, 2015 (Attorney's Ref. No. 6583-488-PCT) 7 pages				
	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2013/055280, mailed Jun. 11, 2015 (Attorney's Ref. No. 6583-489-PCT) 9 pages				
Examiner Signature		Date Considered			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

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				Application Number	13/968,665
INFORMATION DISCLOSURE				Filing Date	August 16, 2013
STATEMENT BY APPLICANT (Use as many sheets as necessary)			PLICANT	First Named Inventor	Sanjiv Sirpal
			ecessary)	Art Unit	2421
				Examiner Name	James R. Marandi
Sheet	2	of	2	Attorney Docket Number	6583-488

17	Official Action for U.S. Patent Application No. 13/968,948, mailed Mar. 11, 2015 (Attorney's Ref. No. 6583-450) 13 pages
18	Official Action for U.S. Patent Application No. 13/968,948, mailed Jul. 17, 2015 (Attorney's Ref. No. 6583-450) 13 pages
19	Official Action for U.S. Patent Application No. 13/968,929, mailed Apr. 29, 2015 (Attorney's Ref. No. 6583-451) 12 pages
20	Official Action for U.S. Patent Application No. 13/969,588, mailed Mar. 11, 2015 (Attorney's Ref. No. 6583-452) 12 pages
21	Official Action for U.S. Patent Application No. 13/969,588, mailed Aug. 17, 2015 (Attorney's Ref. No. 6583-452) 13 pages
22	Official Action for U.S. Patent Application No. 13/970,374, mailed May 22, 2015 (Attorney's Ref. No. 6583-481) 11 pages
23	Official Action for U.S. Patent Application No. 13/968,897, mailed May 08, 2015 (Attorney's Ref. No. 6583-489) 21 pages

Examiner Date	
Signature   Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

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SHERIDAN ROSS, P.C DOCKETING DEPT.

#### PATENT COOPERATION TREATY

**PCT** 

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)

(PCT Rule 44bis.1(c))

Date of mailing (day/month/year)
26 February 2015 (26.02.2015)

Applicant's or agent's file reference 6583-450-PCT

IMPORTANT NOTICE

From the INTERNATIONAL BUREAU

LENNOX-GENTLE, Thaine

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International application No. PCT/US2013/055294

International filing date (day/month/year)
16 August 2013 (16.08.2013)

Priority date (day/month/year)
17 August 2012 (17.08.2012)

Applicant

FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

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e-mail: pt01.pct@wipo.int

Form PCT/IB/326 (January 2004)



#### PATENT COOPERATION TREATY

### **PCT**

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 6583-450-PCT	FOR FURTHER ACTION	See item 4 below		
International application No. PCT/US2013/055294 International filing date (day/month/year) 16 August 2013 (16.08.2013)		Priority date (day/month/year) 17 August 2012 (17.08.2012)		
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237				
Applicant FLEXTRONICS AP, LLC				

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 $bis.1(a)$ .				
2.	This RE	PORT consists of a to	otal of 8 sheets, including this cover sheet.		
*************************	In the at	tached sheets, any ref e to the international	rerence to the written opinion of the International Searching Authority should be read as a preliminary report on patentability (Chapter I) instead.		
3.	This rep	ort contains indication	ns relating to the following items:		
	$\mathbf{X}$	Box No. I	Basis of the report		
		Box No. II	Priority		
		Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability		
		Box No. IV	Lack of unity of invention		
	X	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
		Box No. VI	Certain documents cited		
		Box No. VII	Certain defects in the international application		
		Box No. VIII	Certain observations on the international application		
4.	<ol> <li>The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).</li> </ol>				

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  Kihwan Moon
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Form PCT/IB/373 (January 2004)

### PATENT COOPERATION TREATY 055294 02.12.2013

From the INTERNATIONAL SEARCHING AUTHO	RITY		•	
To: THAINE LENNOX-GENTLE SHERIDAN ROSS P.C. 1560 BROADWAY SUITE 1200		PCT  WRITTEN OPINION OF THE		
DENVER, CO 80202		INTERNATIONAL SEARCHING AUTHORITY		
	,	,	(PCT Rule 43bis.1)	
<b>.</b> .		<u> </u>		
		Date of mailing (day/month/year)	02DEC 2013	
Applicant's or agent's file reference 6583-450-PCT		FOR FURTHER ACTION  See paragraph 2 below		
International application No.	International filing date	(day/month/year)	Priority date (day/month/year)	
PCT/US2013/055294	16 August 2013	· · ·	17 August 2012	
International Patent Classification (IPC) or both national classification and IPC IPC(8) - H04N 5/445 (2013.01) USPC - 725/39				
Applicant FLEXTRONICS AP, LLC	•			
·				
1. This opinion contains indications relating to the following items:				
Box No. 1 Basis of the opinion				
Box No. II Priority				
Box No. III 'Non-establishment of opinion with regard to novelty, inventive step and industrial applicability				
Box No. IV Lack of unity of invention				
Box No. V Reasoned statement under Rule 43bis. 1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement				
Box No. VI Certain documents cited				
Box No. VII Certain defects in the international application				
Box No. VIII Certain observa	tions on the internations	al application		
2. FURTHER ACTION				
If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.				
If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.				
For further options, see Form PCT/ISA/220.				
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Name and mailing address of the ISA/US Date of completion of this opin			Authorized officer:	
Mail Stop PCT, Attn: ISA/US			Blaine R. Copenheaver	
Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450	07 November 201	13	PCT Helpdesk: 571-272-4300	
Facsimile No. 571-273-3201			PCT OSP: 571-272-7774	

Form PCT/ISA/237 (cover sheet) (July 2011)

## PCT/US2013/055294 02 12 2013 International application No. PCT/US2013/055294

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

Box	No. I	Basis of this opinion
1.	With r	egard to the language, this opinion has been established on the basis of:
	$\boxtimes$	the international application in the language in which it was filed.
		a translation of the international application into which is the language of a
		translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2.		This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified
		to this Authority under Rule 91 (Rule 43bis.1(a))
2	With .	
٥.	establi	egard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been shed on the basis of a sequence listing filed or furnished:
	a. (m	
		on paper
		in electronic form
	b. (tir	ne)
		in the international application as filed
		together with the international application in electronic form
	F	subsequently to this Authority for the purposes of search
		*
4.	П	In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required
		statements that the information in the subsequent or additional copies is identical to that in the application as filed or
		does not go beyond the application as filed, as appropriate, were furnished.
	A ddiet.	onal comments:
٥.	Addin	onal comments:
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#### PCT/US20<del>13/055294 02.12.2013</del>

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US2013/055294

Box	No. V	Reasoned statement un citations and explanati	nder Rule 43 ons supporti	bis.1(a)(i) with regard to novelty, inven ng such statement	ntive step or industrial applicability;
1.	Statemer	nt			
	Nove	lty (N)	Claims	1-20	YES
		•	Claims	None	NO
	Inven	tive step (IS)	Claims	None	YES
			Claims .	1-20	. NO
	Indus	trial applicability (IA)	Claims	1-20	YES
			Claims	None	NO
			S.dillis		, NO

#### 2. Citations and explanations:

Claims 1-20 lacks an inventive step under PCT Article 33(3) as being obvious over Hwang in view of Klosterman et al.

Regarding claim 1, Hwang disclose a method (Metadata Display Control Method and System for Broadcast Receiver, abstract), comprising:

Presenting, via a display of an intelligent television (TV), live TV content, wherein the live TV content is presented to a first portion of the display (The display unit 140 displays the video data of the broadcast program transmitted by the broadcast station, fig.1-2, para. 0033); Receiving an electronic program guide (EPG) presentation input at the intelligent TV (Electronic Program Guide (EPG) is referred to as "Metadata", para. 0005, 0026; Interactive TV 100 receives the broadcast programs and Metadata associated with broadcast program, fig. 2, 0036); and

Determining, by a processor associated with the intelligent TV and in response to receiving the EPG presentation input, EPG information that corresponds to at least one of the presented live TV content and the EPG presentation input received (the metadata is transmitted to the mobile terminal 300 through a Bluetooth link established between the interactive TV 100 and the mobile terminal 300, para. 0036, 0037; the controller 370 monitors to detect user command input by the viewer and determines, if a user command is detected, once determined if the metadata is received, the metadata (EPG) associated with the broadcast program is displayed, fig. 6, para. 0064-0065); and

Retrieving, from at least one source, the EPG information (the control unit 160 of the interactive TV 100 receives metadata (EPG) associated broadcast programs provided by the broadcast station or broadcast service provider, fig. 1, para. 0035).

Hwang fails to specifically teach determining, by processor, an EPG presentation layout, wherein the EPG presentation layout includes at least one position associated with content of the EPG information within a live TV application panel. However, Klosterman et al. discloses a system/method for displaying an electronic program guide (Abstract) and teaches determining an EPG presentation layout, wherein the EPG presentation layout includes at least one position associated with content of the EPG information within a live TV application panel ( a program guide data processor 1205 and a plug-in program guide controller module 1240 wherein the module 1240 determines the program guide 1205 capabilities by allowing user to customize the program guide layout, fig. 12, col.12, lines 65-67 and col. 13, lines 10-21; a user may evoke a preview screen within the display content where the user can view EPG information within a live TV application panel which can be referred to a hypertune, fig. 6d, col. 10, lines 1-14).

Hwang teaches that the metadata (EPG) can overlap the broadcast program displayed on screen of the interactive TV 100 (fig. 2, para. 0036), but fails to specifically teach presenting, via the display, the EPG information in the EPG presentation layout to a second portion of the display, wherein the second portion of the display is associated with the live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV content. However, Klosterman et al. teaches presenting, via the display, the EPG information in the EPG presentation layout to a second portion of the display, wherein the second portion of the display is associated with the live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV content (a preview window or a pop-up window that can overlap the current live program while searching or messaging the program guide via user interaction, fig. 2, col. 7, lines 62-67 and fig. 5a, col. 8, lines 42-59 and fig. 6d, col. 10, lines 1-14). Therefore, it would have been obvious to one of ordinary skill at the time of the invention to use the teaching of an Electronic Program Guide display system and method that includes a processor capable of processing the user command for EPG layout presentation and output displays overlays, picture-in-picture, and pop-up windows while responding to user commands during live content broadcast as taught by Klosterman et al. to incorporate the above EPG displaying features in the invention of Hwang in order to provide an easy and convenient way to manipulate the electronic program guide based on user command and preferences (Klosterman et al., col. 1, line 64 - col. 2, line 7).

#### PCT/US2013/055294 02:12.2013

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

nternational application No.
PCT/US2013/055294

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Regarding claim 2, Hwang disclose the method of claim 1, wherein determining the EPG presentation layout further comprises:

Referring to rules stored in a memory, wherein the rules include one or more EPG information layout templates, wherein the one or more EPG information layout templates correspond to one or more EPG presentation inputs (storage 360 stores application programs associated with functions of the mobile terminal 300, metadata and sub-metadata from interactive TV or user data and may be divided into program region and a data region, fig. 4, para. 0048):

Associated with relictions of the most termine soon in the second of the second of the items on the interest of the interest of the items constituting the metadata, controller 370 transmits the information of the selected item to the interactive TV 100 and the metadata is displayed currently, when channel is switched or program ended, fig. 4, para.0050); and

Hwang fails to specifically teach determining, based on the match, a select EPG information layout template for the EPG presentation layout from the one or more EPG information layout templates. However, Klosterman et al. teaches determining, based on the match, a select EPG information layout template for the EPG presentation layout from the one or more EPG information layout templates (an electronic program guide that can have different display arrangements such as different typeface, different color, given additional space for program description or other graphic enhancements, thereby one can conclude that such preference is stored in a computer readable medium of the device 100, fig. 2, col. 6, lines 59-63; User can upgrade/change program guides based on preferences, col. 13, lines 10-25. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teaching of the use of EPG layout choices stored in memory based on user or provider as taught by Klosterman et al. to incorporate the above features in the invention of Hwang in order to allow modification and alterations to the program guide without requiring major hardware changes.

Regarding claim 3, Hwang discloses the method of claim 1, wherein the EPG information is retrieved from two or more signal sources (EPG information is retrieved from interactive TV control system includes broadcast receiver unit 110, data processing unit 115, a feedback data transmitter 120, Bluetooth unit 130, storage unit 120 and a control unit 160, Fig. 2, para, 0028).

Regarding claim 4, Hwang discloses the method of claim 1, wherein the at least one source is at least one of a local memory, a remote memory, a broadcast signal, and a memory located across a network (broadcast receiver unit 110 receives and processes the broadcast signals and transmitter 120 receives and transmits channel data via IP network, fig. 2, para. 0029 and para. 0031).

Regarding claim 5, Hwang discloses the method of claim 1, wherein at least one of EPG information and the live TV application panel is at least partially transparent, and wherein the presented live TV content is visible beneath the presented EPG information (the Bluetooth communication link established through the interactive TV 100 is disabled allowing the metadata (EPG, para. 0026) to overlap the current broadcast program displayed, fig. 1, para. 0036).

Regarding claim 6, Hwang disclose the method of claim 1, wherein the EPG presentation input is provided via an input device associated with the intelligent TV (mobile terminal 300 can communicate with interactive TV 100, the viewer may request and receive metadata from the mobile device 300, fig. 1, para. 0036 and fig. 6, para. 0064).

Regarding claim 7, Hwang disclose the method of claim 1, but fails to specifically teach wherein the EPG presentation layout is arranged to present the EPG information in a tabular format. However, Klosterman et al. teaches wherein the EPG presentation layout is arranged to present the EPG information in a tabular format (a grid format for the schedule guide display output based on an x-y axis layout, fig. 1 & fig. 3a, col. 5, lines 44-46). It would have been obvious to one of ordinary skill at the time of the invention to use the teachings of a grid format arrangement for the EPG layout displayed on the interactive TV as taught by Klosterman et al. to incorporate the above EPG presentation layout in the invention of Hwang in order to provide multiple options for viewing and selecting EPG information for user, providing an easier access to information or by providing a user a customization experience.

Regarding claim 8, Hwang disclose the method of claim 7, but fails to specifically teach wherein the tabular format is ordered by at least one of channel number and time associated with the EPG information. However, Klosterman et al. teaches wherein the tabular format is ordered by at least one of channel number and time associated with the EPG information (guide screen 200 contains cells 245 and each cell may contain channel number 32, program service name, and Program Broadcast Service name, fig. 2, col. 6, lines 46-52; an EPG layout format that includes channel name, time and additional information as it relates to the EPG information provided (fig. 4a, col. 8, lines 17-25). It would have been obvious to one of ordinary skill at the time of the invention to use the teaching of a program guide with program detail information such as time, name and channel of the program information as taught by Klosterman et al. to incorporate the above features in the invention of Hwang in order to provide user with detailed information and options for easy manipulation by user in an electronic program guide system and method.

Regarding claim 9, Hwang disclose the method of claim 8, wherein the EPG information is associated with preferred content (controller 370 detects and determines user commands and user selection command of metadata (EPG) associated with broadcast program, fig. 6, para. 0064-0066).

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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/055294

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Regarding claim 10, Hwang disclose the method of claim 1, further comprising:

Determining a select-focus is associated with an EPG entry in the presented EPG information (Controller 370 determines user selection command input based on the received metadata (EPG) information, fig. 6, para. 0065-0066).

Hwang fails to specifically teach initiating a timer associated with the determined select-focus, wherein the timer includes a goal timer. However, Klosterman et al. teaches initiating a timer associated with the determined select-focus, wherein the timer includes a goal timer (a guide screen 400 having an interactive information region where the user can select a program that has a later scheduled time and may select the recording option or the auto tune option to view upcoming program or the description of the program content, fig. 4,col. 8, lines 26-41).

Hwang also fails to specifically teach presenting, upon reaching the goal time, an EPG preview window adjacent to the EPG entry associated with the select-focus, wherein the EPG preview window includes at least one of a thumbnail graphic, a description, and a time associated with the EPG entry. However, Klosterman et al. teaches presenting, upon reaching the goal time, an EPG preview window adjacent to the EPG entry associated with the select-focus, wherein the EPG preview window includes at least one of a thumbnail graphic, a description, and a time associated with the EPG entry (a guide screen 500 that has an interactive region 520 where message screen 550 displays description of the program content and may contain an icon linked to a short video preview and the preview may be in the form of picture-in-picture displaying possible information about upcoming program, fig. 5a-b, col. 8, lines 43-59). It would have been obvious to one of ordinary skill at the time of the invention to use the teachings of a timer and a preview window capable of recording or auto tuning broadcast programs along with EPG information displayed in a preview window as taught by Klosterman et al. to incorporate the above EPG features in the invention of Hwang in order to provide users with the convenience of viewing a program at a later time or to preview a program to determine the user's preference.

Regarding claim 11, Hwang discloses the method of claim 10, wherein the EPG preview window includes a preview indicator, and wherein the preview indicator is linked to the EPG entry (the Interactive TV 100 displays a query message asking whether to receive the metadata (EPG) in the form of pop-up window, for example a user selects a channel on the interactive TV 100, then a pop-up window is displayed presenting a querying message asking whether to receive metadata (EPG) associated with broadcast program on display, fig. 5, para. 0056-0057).

Regarding claim 12, Hwang disclose a tangible, non-transitory computer readable medium having instructions stored there on that, when executed by a processor (storage unit 360 stores application programs, metadata and sub metadata, fig. 3, para.0048), perform the method comprising:

Presenting, via a display of an intelligent television (TV), live TV content, wherein the live TV content is presented to a first portion of the display (The display unit 140 displays the video data of the broadcast program transmitted by the broadcast station, fig. 1-2, para. 0033); Receiving an electronic program guide (EPG) presentation input at the intelligent TV (Electronic Program Guide (EPG) is referred to as "Metadata", para. 0026; Interactive TV 100 receives the broadcast programs and Metadata associated with broadcast program, fig. 2, para 0036); and

Determining, by a processor associated with the intelligent TV and in response to receiving the EPG presentation input, EPG information that corresponds to at least one of the presented live TV content and the EPG presentation input received (the metadata is transmitted to the mobile terminal 300 through a Bluetooth link established between the interactive TV 100 and the mobile terminal 300, para. 0036, 0037; the controller 370 monitors to detect user command input by the viewer and determines, if a user command is detected, once determined if the metadata is received, the metadata (EPG) associated with the broadcast program is displayed, fig. 6, para. 0064-0065); and

Retrieving, from at least one source, the EPG information (the control unit 160 of the interactive TV 100 receives metadata (EPG) associated broadcast programs provided by the broadcast station or broadcast service provider, fig. 1, para. 0035).

Hwang fails to specifically teach determining, by processor, an EPG presentation layout, wherein the EPG presentation layout includes at least one position associated with content of the EPG information within a live TV application panel. However, Klosterman et al. discloses a system/method for displaying an electronic program guide (Abstract) and teaches determining an EPG presentation layout, wherein the EPG presentation layout includes at least one position associated with content of the EPG information within a live TV application panel (a program guide data processor 1205 and a plug-in program guide controller module 1240 wherein the module 1240 determines the program guide 1205 capabilities by allowing user to customize the program guide layout, fig. 12, col. 12, lines 65-67 and col. 13, lines 10-21; a user may evoke a preview screen within the display content where the user can view EPG information within a live TV application panel which can be referred to a hypertune, fig. 6d, col. 10, lines 1-14).

Hwang teaches that the metadata (EPG) can overlap the broadcast program displayed on screen of the interactive TV 100 (fig. 2, para. 0036), but fails to specifically teach presenting, via the display, the EPG information in the EPG presentation layout to a second portion of the display, wherein the second portion of the display is associated with the live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV content. However, Klosterman et al. teaches presenting, via the display, the EPG information in the EPG presentation layout to a second portion of the display, wherein the second portion of the display is associated with the live TV application panel, and wherein the live TV application panel overlaps at least a portion of the display is associated with the live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV content (a preview window or a pop-up window that can overlap the current live program while searching or messaging the program guide via user interaction, fig. 2, col. 7, lines 62-67 and fig. 5a, col. 8, lines 42-59 and fig. 6d, col. 10, lines 1-14). Therefore, it would have been obvious to one of ordinary skill at the time of the invention to use the teaching the teaching of an Electronic Program Guide display system and method that includes a processor capable of processing the user command for EPG layout presentation and output displays overlays, picture-in-picture, and pop-up windows while responding to user commands during live content broadcast as taught by Klosterman et al. to incorporate the above EPG displaying features in the invention of Hwang in order to provide an easy and convenient way to manipulate the electronic program guide based on user command and preferences (Klosterman et al., col. 1, line 64 - col. 2, line 7).

### PCT/US2<del>013/055294 02.12.2013</del>

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

rnational application No. PCT/US2013/055294

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Regarding claim 13, Hwang disclose the tangible, non-transitory computer readable medium of claim 12, wherein determining the EPG presentation layout further comprises:

Referring to rules stored in a memory, wherein the rules include one or more EPG information layout templates, wherein the one or more EPG information layout templates correspond to one or more EPG presentation inputs (storage 360 stores application programs associated with functions of the mobile terminal 300, metadata and sub-metadata from interactive TV or user data and may be divided into program region and a data region, fig. 4, para. 0048);

Matching the received EPG presentation input to one of the one or more EPG presentation inputs (user selects one of the items constituting the metadata, controller 370 transmits the information of the selected item to the interactive TV 100 and the metadata is displayed currently, when channel is switched or program ended, fig. 4, para.0050).

Hwang fails to specifically teach determining, based on the match, a select EPG information layout template for the EPG presentation layout from the one or more EPG information layout templates. However, Klosterman et al. teaches determining, based on the match, a select EPG information layout template for the EPG presentation layout from the one or more EPG information layout templates (an electronic program guide that can have different display arrangements such as different typeface, different color, given additional space for program description or other graphic enhancements, thereby one can conclude that such preference is stored in a computer readable medium of the device 100, fig. 2, col. 6, lines 59-63; User can upgrade/change program guides based on preferences, col. 13, lines 10-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of the use of EPG layout choices stored in memory based on user or provider as taught by Klosterman et al. to incorporate the above desired EPG features in the invention of Hwang in order to allow modification and alterations to the program guide without requiring major hardware changes.

Regarding claim 14, Hwang discloses the tangible, non-transitory computer readable medium of claim 12, wherein the EPG information is retrieved from two or more signal sources (EPG information is retrieved from interactive TV control system includes broadcast receiver unit 110, data processing unit 115, a feedback data transmitter 120, Bluetooth unit 130, storage unit 120 and a control unit 160, Fig. 2, para, 0028).

Regarding claim 15, Hwang discloses the tangible, non-transitory computer readable medium of claim 12, wherein the at least one source is at least one of a local memory, a remote memory, a broadcast signal, and a memory located across a network (broadcast receiver unit 110 receives and processes the broadcast signals and transmitter 120 receives and transmits channel data via IP network, fig. 2, para. 0029 and para. 0031).

Regarding claim 16, Hwang discloses the tangible, non-transitory computer readable medium of claim 12, wherein at least one of EPG information and the live TV application panel is at least partially transparent, and wherein the presented live TV content is visible beneath the presented EPG information (the Bluetooth communication link established through the interactive TV 100 is disabled allowing the metadata (EPG, para. 0026) to overlap the current broadcast program displayed, fig. 1, para. 0036).

Regarding claim 17, Hwang disclose the tangible, non-transitory computer readable medium of claim 12, but fails to specifically teach wherein the EPG presentation layout is arranged to present the EPG information in a tabular format. However, Klosterman et al. teaches wherein the EPG presentation layout is arranged to present the EPG information in a tabular format (a grid format for the schedule guide display output based on an x-y axis layout, fig. 1 & fig. 3a, col. 5, lines 44-46). ITherefore, it would have been obvious to one of ordinary skill at the time of the invention to combine a grid format arrangement for the EPG layout displayed on the interactive TV as taught by Klosterman et al. to incorporate the above desired EPG displaying format in the invention of Hwang in order to provide multiple options for viewing and selecting EPG information for user, providing an easier access to information or by providing a user a customization experience.

Regarding claim 18, Hwang disclose the tangible, non-transitory computer readable medium of claim 12, wherein the method further comprising:

Determining a select-focus is associated with an EPG entry in the presented EPG information (Controller 370 determines user selection command input based on the received metadata (EPG) information, fig. 6, para. 0065-0066).

Hwang fails to specifically teach initiating a timer associated with the determined select-focus, wherein the timer includes a goal timer.

Hwang fails to specifically teach initiating a timer associated with the determined select-focus, wherein the timer includes a goal timer. However, Klosterman et al. teaches initiating a timer associated with the determined select-focus, wherein the timer includes a goal timer (a guide screen 400 having an interactive information region where the user can select a program that has a later scheduled time and may select the recording option or the auto tune option to view upcoming program or the description of the program content, fig. 4,col. 8, lines 26-41).

Hwang also fails to specifically teach presenting, upon reaching the goal time, an EPG preview window adjacent to the EPG entry associated with the select-focus, wherein the EPG preview window includes at least one of a thumbnail graphic, a description, and a time associated with the EPG entry. However, Klosterman et al. teaches presenting, upon reaching the goal time, an EPG preview window adjacent to the EPG entry associated with the select-focus, wherein the EPG preview window includes at least one of a thumbnail graphic, a description, and a time associated with the EPG entry (a guide screen 500 that has an interactive region 520 where message screen 550 displays description of the program content and may contain an icon linked to a short video preview and the preview may be in the form of picture-in-picture displaying possible information about upcoming program, fig. 5a-b, col. 8, lines 43-59). Therefore, it would have been obvious to one of ordinary skill at the time of the invention to use the teachings of a timer and a preview window capable of recording or auto tuning broadcast programs along with EPG information displayed in a preview window as taught by Klosterman et al. to incorporate the above desired EPG features in the invention of Hwang in order to provide users with the convenience of viewing a program at a later time or to preview a program to determine the user's preference.

Regarding claim 19, Hwang discloses the tangible, non-transitory computer readable medium of claim 12, wherein the EPG preview window includes a preview indicator, and wherein the preview indicator is linked to the EPG entry (the Interactive TV 100 displays a query message asking whether to receive the metadata (EPG) in the form of pop-up window, for example a user selects a channel on the interactive TV 100, then a pop-up window is displayed presenting a querying message asking whether to receive metadata (EPG) associated with broadcast program on display, fig. 5, para. 0056-0057)

#### PCT/US20<del>13/055294 02.12.2013</del>

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application PCT/US2013/055294

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient. Continuation of:

Regarding claim 20. Hwang disclose a system (Interactive TV of a metadata display control system, abstract, fig.1) comprising: An intelligent television (TV) having a display and a tuner, wherein the tuner is configured to receive and convert broadcast content signals to be displayed by the display (Interactive TV 100 having display unit 140 and broadcast receiver unit 110 includes a tuner and demodulator which receives and converts broadcast signal to be outputted to the display unit 140, fig. 2, para. 0029-0030);

An input device associated with the intelligent TV (mobile terminal 300, fig. 1, para. 0032);

A memory (storage unit 150 and storage 360 stores application programs, metadata, sub metadata, and recorded broadcast programs fig. 2, para. 0034 and fig. 4, para. 0048); and

A microprocessor (Data processing unit 115, fig. 2, para. 0030) operable to:

Present, via a display of an intelligent television (TV), live TV content, wherein the live TV content is presented to a first portion of the display (The display unit 140 displays the video data of the broadcast program transmitted by the broadcast station, fig:1-2, para. 0033); Receive an electronic program guide (EPG) presentation input at the intelligent TV (Electronic Program Guide (EPG) is referred to as "Metadata", para. 0005, 0026; Interactive TV 100 receives the broadcast programs and Metadata associated with broadcast program, fig. 2, para. 0036); and

Determine, in response to receiving the EPG presentation input, EPG information that corresponds to at least one of the presented live TV content and the EPG presentation input received (the metadata is transmitted to the mobile terminal 300 through a Bluetooth link established between the interactive TV 100 and the mobile terminal 300, para. 0036, 0037; the controller 370 monitors to detect user command input by the viewer and determines, if a user command is detected, once determined if the metadata is received, the metadata (EPG) associated with the broadcast program is displayed, fig. 6, para. 0064-0065); and

Retrieve, from at least one source, the EPG information (the control unit 160 of the interactive TV 100 receives metadata (EPG) associated broadcast programs provided by the broadcast station or broadcast service provider, fig. 1, para. 0035). Hwang fails to specifically teach determine, an EPG presentation layout, wherein the EPG presentation layout includes at least one position associated with content of the EPG-information within a live TV application panel. However, Klosterman et al. discloses a system/method for displaying an electronic program guide (Abstract) and teaches determine an EPG presentation layout, wherein the EPG presentation layout includes at least one position associated with content of the EPG information within a live TV application panel (a program guide data processor 1205 and a plug-in program guide controller module 1240 wherein the module 1240 determines the program guide 1205 capabilities by allowing user to customize the program guide layout, fig. 12, col.12, lines 65-67 and col. 13, lines 10-21; a user may evoke a preview screen within the display content where the user can view EPG information within a live TV application panel which can be referred to a hypertune, fig. 6d, col. 10, lines 1-14).

Hwang teaches that the metadata (EPG) can overlap the broadcast program displayed on screen of the interactive TV 100 (fig. 2, para. 0036), but fails to specifically teach present, via the display, the EPG information in the EPG presentation layout to a second portion of the display, wherein the second portion of the display is associated with the live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV content. However, Klosterman et al. teaches resent, via the display, the EPG information in the EPG presentation layout to a second portlon of the display, wherein the second portion of the display is associated with the live TV application panel, and wherein the live TV application panel overlaps at least a portion of the presented live TV content (a preview window or a pop-up window that can overlap the current live program while searching or messaging the program guide via user interaction, fig. 2, col. 7, lines 62-67 and fig. 5a, col. 8, lines 42-59 and fig. 6d, col. 10, lines 1-14). Therefore, it would have been obvious to one of ordinary skill at the time of the invention to use the teaching of an Electronic Program Guide display system and method that includes a processor capable of processing the user command for EPG layout presentation and output displays overlays, picture-in-picture, and pop-up windows while responding to user commands during live content broadcast as taught by Klosterman et al. to incorporate the above EPG displaying features in the invention of Hwang in order to provide an easy and convenient way to manipulate the electronic program guide based on user command and preferences (Klosterman et al., col. 1, line 64 - col. 2, line 7).

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

### PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER 1 OF THE PATENT COOPERATION
TREATY)

(PCT Rule 44bis.1(c))

LENNOX-GENTLE, Thaine
SHERIDAN ROSS P.C.
1560 Broadway
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From the INTERNATIONAL BUREAU

Date of mailing (day/month/year) 26 February 2015 (26,02,2015)

Applicant's or agent's file reference 6583-451-PCT

IMPORTANT NOTICE

International application No. PCT/US2013/055296 International filing date (day/month/year) 16 August 2013 (16.08.2013) Priority date (day/montly/ear) 17 August 2012 (17.08.2012)

Applicam

FLEXTRONICS AP, LLC

The international Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter 1 of the Patent Cooperation Treaty)

The International Bureau of WIPO 34, clientin des Colombeues 1211 Geneva 20, Switzerland

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# PCT

#### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 8583-451-PCT	FOR FUETHER ACTION	See item 4 below					
	International filing date (day/month/year) 16 August 2013 (16.08.2013)	Priority date (day/month/year) 17 August 2012 (17.08.2012)					
	nternational Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237						
Applicant FLEXTRONICS AP, LLC							

1.	This international preliminary report on patentability (Chapter I) is issued by the international Bureau on behalf of the international Searching Authority under Rule 44 bis.1(a).						
2.	This Ri	SPORT consists of a to	otal of 7 sheets, including this	s cover sheet.			
	in the a referenc	ituched shoots, any rel to the international	erence to the written opinion preliminary report on patental	of the International Searching Authority should be read as a bility (Chapter I) instead.			
3.	This rep	port contains indication	ns relating to the following in	eins:			
	X	Box No. 1	Basis of the report				
		Box No. II	Priority				
		Box No. III	Non-establishment of op applicability	inion with regard to novelty, inventive step and industrial			
		Box No. IV	Lack of unity of inventi-	m.			
		Box No. V	Reasoned statement unde industrial applicability; c	or Article 35(2) with regard to novelty, inventive step or flations and explanations supporting such statement			
		Box No. VI	Certain documents cited				
		Box No. VII	Certain defects in the im	ernational application			
		Box No. VIII	Certain observations on	the international application			
4.	but not,	ernational Buronu will except where the app wity date (Rule 44bis .	licant makes an express requi	estignmed Offices in accordance with Rules 44bis.3(c) and 93bis.1 est under Article 23(2), before the expiration of 30 months from			
				Date of issuance of this report 17 February 2015 (17.02.2015)			

Authorized officer

34, chemin des Colombettes 1211 Geneva 20, Switzerland Ki Pacsimile No. \*41-22-338-82-70 c-mail: pt01.pct@wipo.int

The International Bureau of WIPO

Form PCT/IB/373 (January 2004)

Kihwan Moon

To: THAME LEISTIVA-GENTLE SHERIDAN ROSS P.C. 1560 BROADWAY SUITE 1200 DENVER, CO 80202			TITEN OPINION OF THE ONAL SEARCHING AUTHORITY  (PCT Rule 4366.1)
		Date of mailing (day/month/year)	2 9 NOV 2013
Applicant's or agent's file reference	***************************************	FOR FURTHER A	CTION
6583-451-PCT			See paragraph 2 below
	International filing date (	(day/month/year)	Priority date (day/month/year)
PCT/US2013/055296	16 August 2013		17 August 2012
International Patent Classification (IPC) or IPC(8) - H04N 5/445 (2013.01) USPC - 725/39 Applicant FLEXTRONICS AP, LLC	both national classificat	ion and IPC	
Box No. IV Lack of unity of  Box No. V Reasoned statem citations and ext  Box No. VI Certain document  Box No. VII Certain defects it  Box No. VIII Certain observat  2. FURTHER ACTION  If a demand for international preliming A other than this one to be the IPEA and opinions of this International Searching If this opinion is, as provided above, or	ent of opinion with regar- invention tent under Rule 43his. I (a planations supporting suc ints cited in the international applic tions on the international hary examination is mad kuthority ("IPEA") excep I the chosen IPEA has es g Authority will not be s considered to be a written riats, with amendments, i of 22 months from the p	d to novelty, inventive  (i) with regard to novel statement  ation  application  ic, this opinion will be a that this does not application of the IPEA, opinion of the IPEA, before the expiration of	e considered to be a written opinion of the ply where the applicant chooses an Authority at Bureau under Rule 66. I bis(b) that written the applicant is invited to submit to the IPEA of 3 months from the date of mailing of Form respires later.
· ·	Date of completion of th	nis opinion	Authorized officer:
Mail Stop PCT, Alth: ISAAIS Commissioner for Palents P.O. Box 1450, Alexandria, Virginia 22313-1450	14 November 2013	\$	Blaine R. Copenheaver PCT Heliodest: 571-572-4300

Form PCT/ISA/237 (cover sheet) (July 2011)

Facsimile No. 571-273-3201

PCT Helpdest: 571-272-4360 PCT OSP: 571-272-7774

PCT/US2013/055296\_29\_11\_2013 International application No. PCT/US2013/055296

#### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

Box	No. I	Basis of this op	inion			*:		**********
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Statement			
Novelty (N)	Claims	None	YE
	Claims	1-20	NO
Inventive step (IS)	Claims	None	YE
	Claims	1-20	NO
Industrial applicability (IA)	Claims	1-20	YE
	Claims	None	NO

#### Citations and explanations:

Claims 1-20 lack novelty under PCT Article 33(2) as being anticipated by Martin et al, hereinafter referred to as Martin. Regarding Claim 1, Martin discloses a method, comprising; presenting, via a display of an intelligent television (TV) (Para. [0005] regarding systems and methods described herein relate to a portal for simultaneously viewing video channels, launching interactive applications, and/or interfacing with locally or remotely stored content), live TV broadcast content (Fig. 7A regarding talkshow video 700; Para. [0088] regarding A given page may display a composite program consisting entirely of live video cells, a composite program containing some live video combined with locally displayed content), wherein the live TV broadcast content is presented to a first portion of the display (Fig. 7A regarding talkshow video 700 over the entire display); receiving an informational input at the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed); determining, by a processor associated with the intelligent TV and in response to receiving the informational input, live TV informational content that corresponds to at least one of the presented live TV broadcast content and the informational input received (Pare. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subjectly retrieving, from at least one source, the live TV informational content (Para. (0035) regarding multiplexer 1040 handles audio and video data mosived from a number of parallel sources and interacts with transmitter 1080 to broadcast the information along a number of channels. In addition to audio and video data, messages, applications); and presenting, via the display, the live TV informational content to a second portion of the display (Fig. 7A regarding into content 704, 706, 706 within semitransparent bar 702; Fig. 7B regarding into cell 710, overlay 712), wherein the second portion of the display is associated with a live TV application panel (Para. (0122) regarding When an entry is solected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subject), and wherein the live TV application panel overlaps at least a portion of the presented live TV broadcast content (Para. [0122] regarding a semi-transparent bar 702 across the bottom of the screen that includes an information icon... the text may be in a semi-transparent background overlaid in the upper left comer of screen 700).

Recarding Claim 2, Martin discloses the method of claim 1, and further discloses wherein determining the live TV informational content further comprises; referring to rules stored in a memory (Para. [0049] regarding STB 1140 includes a central processor 220 including associated memory elemente and adapted to receive input data from ... remote; Para. (0051) regarding The memory of STB 1140 may include EEPROM, host RAM, flash memory for software and data), wherein the rules include one or more informational content fields mapped to at least one live TV broadcast content type (Para. [0051] regarding The memory of STB 1140 may include EEPROM, host RAM, flesh memory for software and data; Para. (0052) regarding Graphics processor 252 is preferably designed to generate a screen display combining moving images together with overlaid text or other images. More specifically, graphics processor 252 can combine four layers; Para. [0122] regarding a new overlay 712 is displayed with details on the selected subject); comparing a live TV broadcast content type associated with the presented live TV broadcast content with the one or more mappert informational content fields (Para. [0052] regarding central processor 220 and combines this information with information received from video decoder 248 to generate the screen display; Para. [0122] regarding a new overlay 712 is displayed with details on the selected subject); determining select informational content fields from the one or more mapped informational content fields (Para. [0122] regarding a new overlay 712 is displayed with details on the selected subject), wherein the select informational content fields are associated with the live TV broadcast content type associated with the presented live TV broadcast content (Para. (0122) regarding If the highlights fron 706 is selected, a composite viden is shown with the talk show video in a window 730 positioned at the upper right corner of the screen and a highlight clip looping in a main window 732); and including the select informational content fields in the five TV informational content for retrieval (Para. [0122] regarding each entry in the information cell 710 can be highlighted using directional keys on remote control 230. When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed).

Regarding Claim 3, Martin discloses the method of claim 1, and further discloses wherein the live TV informational content is retrieved from two or more signal sources (Para, (0036) regarding multiplexer 1046 handles audio and video data received from a number of parallel sources and interacts with transmitter 1060 to broadcast the information along a number of channels. In addition to audio and video data, messages, applications (software programs), CO-quality audio data or any other type of digital data may be introduced into some or all of these channels intermixed).

### PCT/US2043/055296-29\_11\_2013

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US2013/055296

#### Supplemental Box

in case the space in any of the preceding boxes is not sufficient.

Regarding Claim 4, Martin discloses the method of claim 1, and further discloses wherein the at least one source is at least one of a local memory, a remote memory, a broadcast signal, and a memory located across a network (Para. [0035] regarding multiplexer 1040 handles audio and video data received from a number of parallel sources and interacts with transmitter 1080 to broadcast the information along a number of channels. In addition to audio and video data, messages, applications (software programs), CD-quality audio data or any other type of digital data may be introduced into some or all of these channels intermixed; Para. [0050] regarding STB 1140 also includes a tuner 242 and demodulator 244).

Regarding Claim 5, Martin discloses the method of claim 1, and further discloses wherein at teast one of the live TV informational content and the live TV epplication panel is at least partially transparent, and wherein the presented live TV broadcast content is visible beneath the presented live TV informational content (Para. [0122] regarding a semi-transparent bar 702 across the bottom of the screen that includes an information icon 704... the text may be in a semi-transparent background overlaid in the upper left comer of screen 700).

Regarding Claim 6, Martin discloses the method of claim 1, and further discloses wherein a size of the first portion is maintained upon presenting the live TV informational content via the second portion of the display (Fig. 7A to Fig. 7B, wherein talkshow video 700 remains the same size while info 704, 706, 708, window 710, overlay 712 are displayed).

Regarding Claim 7, Martin discloses the method of claim 1, and turther discloses wherein the informational Input is provided via an input device associated with the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed).

Regarding Claim 8, Martin discloses the method of claim 1, and further discloses wherein the presented live TV broadcast content includes at least one of a movie, a TV program, a sport event, a TV special, and a radio program (Fig. 7A regarding talkshow video 700).

Regarding Claim 9, Martin discloses the method of claim 8, and further discloses wherein the presented live TV informational content includes at least one of a program description, a channel identifier, a thurribnail graphic, an electronic program guide (EPG), and preference information (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subject; Para. [0055] regarding program guide applications).

Regarding Claim 10, Martin discloses a tangible, non-transitory computer readable medium having instructions stored thereon that, when executed by a processor (Para. [0061] regarding The memory of STB 1140 may include EEPROM, host RAM, flesh memory for software and data), perform the method comprising: presenting, via a display of an intelligent television (TV) (Para. [0005] regarding systems and methods described herein relate to a portal for simultaneously viewing video channels. Jaunching interactive applications, and/or interfacing with locally or remotely stored content), live TV broadcast content (Fig. 7A regarding talkshow video 700; Para. [0088] regarding A given page may display a composite program consisting entirely of live video cells, a composite program containing some live video combined with locally displayed content), wherein the live TV broadcast content is presented to a first portion of the display (Fig. 7A regarding talkshow video 700 over the entire display); receiving an informational input at the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed); determining, by a processor associated with the presented live TV broadcast content and the informational input, live TV informational content that corresponds to at least one of the presented live TV broadcast content and the informational input, live TV informational content that corresponds to at least one cource, the live TV informational content (Para. [0035] regarding multiplexer 1040 handles audio and video data received from a number of perallel sources and interacts with transmitter 1080 to broadcast the informational content to a second portion of the display is associated with a live TV application panel (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subject), and wherein the live TV application panel overlaps at least a portion of the presente

Regarding Claim 11, Martin discloses a tangible, non-transitory computer readable medium of claim 10, wherein determining the live TV informational content of the method further comprises; referring to rules stored in a memory (Para. (0049) regarding ST8 1140 includes a central processor 220 including associated memory elements and adapted to receive input data from...remote; Para. [0051] regarding The memory of STB 1140 may include EEPROM, host RAM, flash memory for software and data), wherein the rules include one or more informational content fields mapped to at least one live TV broadcast content type (Para. [0051] regarding The memory of STB 1140 may include EEPROM, host RAM, flash memory for software and data; Para. [0052] regarding Graphics processor 252 is preferably designed to generate a screen display combining moving images together with overfaid text or other images. More specifically, graphics processor 252 can combine four layers; Para. [0122] regarding a new overfay 712 is displayed with details on the selected subject); comparing a live TV broadcast content type associated with the presented live TV broadcast content with the one or more mapped informational content fields (Para. [0052] regarding central processor 220 and combines this information with information received from video decoder 248 to generate the screen display; Para. [0122] regarding a new overfay 712 is displayed with details on the selected subject); determining select informational content fields (Para. [0122] regarding a new overfay 712 is displayed with details on the selected subject), wherein the select informational content fields are associated with the live TV broadcast content type associated with the presented live TV broadcast content (Para. [0122] regarding a new overfay 712 is displayed with details on the screen and a highlight clip looping in a main window 732); and including the select informational content fields in the live TV informational content for retrieval (Para. [0122] regarding each entry in the infor

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Regarding Claim 12, Martin discloses the tangible, non-transitory computer readable medium of claim 10, and further discloses wherein the livé TV informational content is retrieved from two or more signal sources (Para. [0035] regarding multiplexer 1040 handles audio and video data received from a number of parallel sources and interacts with transmitter 1080 to broadcast the information along a number of channels. In addition to audio and video data, messages, applications (software programs), CD-quality audio data or any other type of digital data may be introduced into some or all of these channels intermixed).

Regarding Claim 13, Martin discloses the tangible, non-transitory computer readable medium of claim 10, and further discloses wherein the at least one source is at least one of a local memory, a remote memory, a broadcast signal, and a memory located across a network (Para. [0035] regarding multiplexer 1040 handles audio and video data received from a number of parallel sources and interacts with transmitter 1090 to broadcast the information along a number of channels. In addition to audio and video data, messages, applications (software programs), CD-quality audio data or any other type of digital data may be introduced into some or all of these channels intermixed; Para. [0050] regarding STB 1140 also includes a tuner 242 and demodulator 244).

Regarding Claim 14, Mertin discloses the tangible, non-transitory computer readable medium of claim 10, and further discloses wherein at least one of the live TV informational content and the live TV application penel is at least partially transparent, and wherein the presented live TV broadcast content is visible beneath the presented live TV informational content (Para. [0122] regarding a semi-transparent bar 702 across the bottom of the screen that includes an information icon 704... the text may be in a semi-transparent background overlaid in the upper left comer of screen 700).

Regarding Claim 15, Martin discloses the tangible, non-transitory computer readable medium of claim 10, and further discloses wherein a size of the first portion is maintained upon presenting the live TV informational content via the second portion of the display (Fig. 7A to Fig. 7B, wherein talkshow video 700 remains the same size while info 704, 706, 708, window 710, overlay 712 are displayed).

Regarding Claim 16, Martin discloses the tangible, non-transitory computer readable medium of claim 10, and further discloses wherein the informational input is provided via an input device associated with the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed).

Regarding Claim 17, Martin discloses the tangible, non-transitory computer readable medium of claim 10, and further discloses wherein the presented live TV broadcast content includes at least one of a movie, a TV program, a sport event, a TV special, and a radio program (Fig. 7A regarding talkshow video 700).

Regarding Claim 16, Martin discloses the tangible, non-transitory computer readable medium of claim 17, and further discloses wherein the presented live TV informational content includes at least one of a program description, a channel identifier, a thumbhall graphic, an electronic program guide (EPG), and preference information (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subject; Para. [0055] regarding program guide applications).

Regarding Claim 19, Martin discloses a system, comprising: an intelligent television (TV) having a display (Para. [0005] regarding systems and methods described herein relate to a portal for simultaneously viewing video channels, launching interactive applications, and/or interfacing with locally or remotely stored content) and a tuner (Para. [0050] regarding STB 1140 also includes a tuner 24), wherein the tuner is configured to receive and convert broadcast content signals to be displayed by the display (Para. [0050] regarding STB 1140 also includes a tuner 242 and demodulator 244 (e.g., a 256 QAM demodulator) to receive and demodulate the received transmissions which are then filtered and demultiplexed by unit 240); an input device associated with the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed); a memory (Para. [0049] regarding STB 1140 includes a central processor 220 including associated memory elements); and a microprocessor (Para. [0049] regarding \$T8 1140 includes a central processor 220 including associated memory elements and adapted to receive input data from...remote) operable to: present, via the display, live TV broadcast content (Para. [0117] regarding a live event broadcast on at least one channel into the data stream of at least one other channel), wherein the tive TV broadcast content is presented to a first portion of the display (Fig. 7A regarding talkshow video 700); receive an informational input at the intelligent TV (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed); determine, in response to receiving the informational input, live TV informational content that corresponds to at least one of the presented live TV broadcast content and the informational input received (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subject), retrieve, from at least one source, the live TV informational content (Para. [0035] regarding multiplexer 1040 handles audio and video data received from a number of parallel sources and interacts with transmitter 1080 to broadcast the information along a number of channels. In addition to audio and video data, messages, applications); and present, via the display, the live TV informational content to a second portion of the display (Fig. 7A regarding info content 704, 706, 708 within semitransparent bar 702; Fig. 7B regarding info cell 710, overlay 712), wherein the second portion of the display is associated with a live TV application panel (Para. [0122] regarding When an entry is selected using "OK" key 330 on remote control 230, a new overlay 712 is displayed with details on the selected subject), and wherein the live TV application panel overlaps at least a portion of the presented live TV broadcast content (Para. [0122] regarding a semi-transparent bar 702 across the bottom of the screen that includes an information icon... the text may be in a semi-transparent background overlaid in the upper left comer of screen 700).

PCT/US2043/056286-29-11-2013

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

mational application No PCT/US2013/055296

Supplemental Box

in case the space in any of the preceding boxes is not sufficient.

Regarding Claim 20, Martin discloses the system of claim 19, and further discloses wherein determining the live TV informational content further comprises: referring to rules stored in the memory (Para. [0049] regarding STB 1140 includes a central processor 220 including associated memory elements and adapted to receive input data from...remote; Para. [0051] regarding The memory of STB 1140 may include EEPROM, host RAM, flash memory for software and data), wherein the rules include one or more informational content fields mapped to at least one live TV broadcast content type (Para. [0051] regarding The memory of STB 1140 may include EEPROM, host RAM, flash memory for software and data. Para. [0052] regarding Graphics processor 252 is preferably designed to generate a screen display combining moving images together with overtaid text or other images. More specifically, graphics processor 252 can combine four type associated with the presented live TV broadcast content with the one or more mapped informational content fleids (Para. [0052] regarding central processor 220 and combines this information with information received from video decoder 248 to generate the screen display. Para. [0122] regarding a new overlay 712 is displayed with details on the selected subject); determining select informational content fields (Para. [0122] regarding a new overlay 712 is displayed with details on the selected subject), determining select informational content fields (Para. [0122] regarding a new overlay 712 is displayed with details on the selected subject), wherein the select informational content fields (Para. [0122] regarding a new overlay 712 is displayed with details on the selected subject), wherein the select informational content fields (Para. [0122] regarding a new overlay 712 is displayed with details on the selected subject), wherein the select informational content fields (Para. [0122] regarding in a main window 732); and including the select informational content fields in the live TV informational content for

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus industrial applicability has been met because the subject matter claimed can be made or used in industry.

From the INTERNATIONAL BUREAU

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NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)

(PCT Rule 44bis.1(c))

PEARSON, Kendria, E. Sheridan Ross P.C. 1560 Broadway

Suite 1200 Denver, CO 80202 ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year) 26 February 2015 (26.02.2015)

Applicant's or agent's file reference 6583-452-PCT

International application No. PCT/US2013/055493

International filing date (day/month/year)
18 August 2013 (18.08.2013)

Priority date (day/month/year) 17 August 2012 (17.08.2012)

IMPORTANT NOTICE

Applicant

FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)	

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Kihwan Moon

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# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 6583-452-PCT	FOR FURTHER ACTION	See item 4 below				
	International filing date (day/month/year) 18 August 2013 (18.08.2013)	Priority date (day/month/year) 17 August 2012 (17.08.2012)				
	nternational Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237					
Applicant FLEXTRONICS AP, LLC						

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 <i>bis.</i> 1(a).					
2.	This RE	PORT consists of a to	tal of 7 sheets, including this cover sheet.			
	In the at reference	tached sheets, any refe e to the international p	erence to the written opinion of the International Searching Authority should be read as a reliminary report on patentability (Chapter I) instead.			
3.	This rep	ort contains indication	s relating to the following items:			
	$\boxtimes$	Box No. I	Basis of the report			
		Box No. II	Priority			
		Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability			
		Box No. IV	Lack of unity of invention			
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
		Box No. VI	Certain documents cited			
		Box No. VII	Certain defects in the international application			
		Box No. VIII	Certain observations on the international application			
4.						

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  Kihwan Moon
Facsimile No. +41 22 338 82 70	e-mail: pt01.pct@wipo.int

Form PCT/IB/373 (January 2004)

# PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHO	ORITY		. ·	
To: Kendria E. Pearson Sheridan Ross P.C. 1560 Broadway Suite 1200 Denver, Colorado 80202 United States of America			PCT  EITTEN OPINION OF THE HONAL SEARCHING AUTHORITY  (PCT Rule 43bis.1)	
		Date of mailing		
		(day/month/year)	07 NOV 2013	
Applicant's or agent's file reference 6583-452-PCT		FOR FURTHER A	CTION See paragraph 2 below	
International application No.	International filing date	(day/month/year)	Priority date (day/month/year)	
PCT/US13/55493	18 August 2013 (18		17 August 2012 (17.08.2012)	
International Patent Classification (IPC) o IPC(8) - G06F 3/00, 13/00; H04N USPC - 725/037, 39; 348/14.07				
Applicant Flextronics AP, LLC				
This opinion contains indications rela	ating to the following iter	ns:		
Box No. I Basis of the opi	inion			
Box No. II Priority				
Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability				
Box No. IV Lack of unity o	f invention			
Box No. V Reasoned statement under Rule 45is.1(a)(i) with regard to novelty, inventive step or industrial applicab citations and explanations supporting such statement				
Box No. VI Certain docume	ents cited			
Box No. VII Certain defects	in the international appli	cation	•	
Box No. VIII Certain observa	ations on the internationa	l application	!	
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2 FURTHER ACTION				
International Preliminary Examining	Authority ("IPEA") exce d the chosen IPEA has no	pt that this does not ap tified the Internationa	onsidered to be a written opinion of the oply where the applicant chooses an Authority I Bureau under Rule 66.1 <i>bis</i> (b) that written	
	priate, with amendments,	before the expiration	the applicant is invited to submit to the IPEA of 3 months from the date of mailing of Fom	
For further options, see Form PCT/IS	•	, ame, winesteve		
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Nome and mailing address a Cab - 10 + 410	Data of completic - of the	his opinion	Authorized officer:	
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US	Date of completion of the	·		
Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450	30 October 2013 (	30.10.2013)	Shane Thomas PCT Helpdesk: 571-272-4300	
Facsimile No. 571-273-3201			PCT OSP: 571-272-7774	

Form PCT/ISA/237 (cover sheet) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US13/55493

Box No. I	Basis of this opinion
1. With	regard to the language, this opinion has been established on the basis of:
	the international application in the language in which it was filed.
	a translation of the international application into which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2.	This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43 bis.1(a))
	regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been lished on the basis of a sequence listing filed or furnished:
a. (r	neans)
[	on paper
	in electronic form
b. (t	ime)
ľ	in the international application as filed
	together with the international application in electronic form
[	subsequently to this Authority for the purposes of search
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4.	In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5 Addit	ional comments:
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Form PCT/ISA/237 (Box No. 1) (July 2011)

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US13/55493

Box No. V	Reasoned statement ur citations and explanati		bis.1(a)(i) with regard to novelty, inventing such statement	ive step or industrial applicability;
1. Statem	ent			
Nov	relty (N)	Claims	NONE	YES
		Claims	1-20	NO NO
Inve	entive step (IS)	Claims	NONE	YES
		Claims	1-20	NO
Indu	strial applicability (IA)	Claims	1-20	YES
		Claims	NONE .	NO

#### 2. Citations and explanations:

Claims 1-20 lack novelty under PCT Article 33(2) as being anticipated by US 5,539,479 A Bertram.

As to claim 1, Bertram discloses a method, comprising; presenting, via a display of an intelligent television (TV) (set top devices used as accessories to television receivers may be incorporated directly into which are here called intelligent television receivers, column 33, lines 29-33), live TV broadcast content, wherein the live TV broadcast content is presented to a first portion of the display (the video stream images is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices, Figure 17, column 41, lines 34-39); receiving an application panel input at the intelligent TV, wherein the application panel input corresponds to at least one of a categories input, a favorites input, and a search input (When viewed channels or signal sources are thus constructed into a list, the list may be named such as "Fri Night" for favorite programs (favorites input) viewed that evening or "Kids" for programming specifically selected by or for children (categories input) and saved in system memory, Figure 17, column 41, lines 42-47); determining, by a processor associated with the intelligent TV and in response to receiving the application panel input, live TV application panel content that corresponds to a live TV application and the application panel input received (a processor controlling the video display to execute a control program formulated in a particularly concise language and controlling the display of menus and the like. Menus are displayed as overlays onto a live motion video image, Abstract); retrieving, from at least one source, the live TV application panel content (the display controller modifies displayed visual images by displaying over a portion of a live video images a menu display from which the human observer may select further modifications, FIGS. 13 through 15 column 40, lines 64-67); and presenting; via the display, the live TV a

As to claim 2, Bertram discloses the method of claim 1, wherein determining the live TV application panel content further comprises: referring to rules stored in a memory (the CPU may access control programs stored, for example, in the set top device system memory 45 so as to be accessible to the processor, for controlling the display of visual images by said video display device, column 8, lines 34-39), wherein the rules include one or more application panel content fields mapped to at least one live TV application panel content type (a human observer may cause a processor controlling the video display to execute a control program formulated in a particularly concise language (rules) and controlling the display of menus (TV application panel). Abstract); comparing a live TV application panel content type associated with the presented live TV broadcast content with the one or more mapped application panel content fields (a processor controlling the video display to execute a control program formulated in a particularly concise language and controlling the display of menus and the like. Menus are displayed as overlays onto a live motion video image, Abstract); determining select application panel content fields from the one or more mapped application panel content fields from the one or more mapped application panel content fields (The application begins by displaying Card1. The title of the Card is "Menu 1" and the selectable items are "Weather" (Selection A) and "Sports" (Selection B). If "Weather" is selected, it creates Card2, since this is the action in the "Selection A" line. Card2 is a flow card which immediately displays Card3 since the condition "1=-1" is true, column 37, line 52 through column 38, line 2); and including the select application panel content fields in the live TV application panel content for retrieval (selecting "Menu" (select application panel) will take an observer to the screen of FIG. 17, where the video stream images is displayed in a minor portion of the available screen area (the

As to claim 3, Bertram discloses the method of claim 1, wherein the live TV application panel content is retrieved from two or more signal sources (the video stream images (source 1) is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices (source 2), column 41, lines 33-38).

As to claim 4, Bertram discloses the method of claim 1, wherein the at least one source is at least one of a local memory, a remote memory, a broadcast signal, and a memory located across a network (The television receiver may be one configured to receive broadcast signals of NTSC or PAL standards, column 4, lines 62-64).

-\*\*\*-Continued Within the Next Supplemental Box-\*\*\*-

Form PCT/ISA/237 (Box No. V) (July 2011)

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US13/55493

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of

-\*\*\*-Continued from Box V: Citations and Explanations-\*\*\*-

As to claim 5, Bertram discloses the method of claim 1, wherein at least one of the live TV application panel content and the live TV application panel is at least partially transparent, and wherein the presented live TV broadcast content is visible beneath the presented live TV application panel content (a user may cause a first level of menu to appear in overlay over the video stream and where the comparator may also be used to provide a pixel plane effect, to give transparent colors (partially transparent), column 37, lines 61-62 and column 19, lines 43-46).

As to claim 6, Bertram discloses the method of claim 1, wherein a size of the first portion is maintained upon presenting the live TV application panel content via the second portion of the display (a major portion (size) of the available field is occupied by the video stream image the image of a weather map, partially obscured in FIGS. 14 and 15 by the overlain menus and informational text while a minor portion (size) is occupied by the displayed menu(s), Figure 13, column 41, lines 1-5).

As to claim 7, Bertram discloses the method of claim 1, wherein the presented live TV broadcast content includes at least one of a movie, a TV program, a sport event, a TV special, and a radio program (The application begins by displaying Card1. The title of the Card is "Menu 1" and the selectable items are "Weather" Selection A and "Sports" Selection B, Figures 17 and 18, column 37, lines 62-66).

As to claim 8, Bertram discloses the method of claim 7, wherein the presented live TV application panel content includes at least one of a category, a channel identifier, a thumbnail graphic, an electronic program guide (EPG), a favorite, and a search term (the remote control functions enables use of the embodied icons (thumbnail graphic) such as the iconic representations of "channel up" or "channel down" (channel identifier) found in remote control functionality for navigation among programming choices. However, by selecting "List" or "Menu", other services may be accessed, Figures 17 and 18, column 41, lines 27-33).

As to claim 9, Bertram discloses a tangible, non-transitory computer readable medium having instructions stored thereon that, when executed by a processor (the CPU may access control programs stored, for example, in the set top device system memory 45 so as to be accessible to the processor, for controlling the display of visual images by said video display device, column 8, lines 34-39), perform the method comprising; presenting, via a display of an intelligent television (TV) (set top devices used as accessories to television receivers may be incorporated directly into which are here called intelligent television receivers, column 33, lines 29-33), live TV broadcast content, wherein the live TV broadcast content is presented to a first portion of the display (the video stream images is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices, Figure 17, column 41, lines 34-39); receiving an application panel input at the intelligent TV, wherein the application panel input corresponds to at least one of a categories input, a favorites input, and a search input (When viewed channels or signal sources are thus constructed into a list, the list may be named such as "Fri Night" for favorite programs (favorites input) viewed that evening or "Kids" for programming specifically selected by or for children (categories input) and saved in system memory, Figure 17, column 41, lines 42-47); determining, by a processor associated with the intelligent TV and in response to receiving the application panel input, live TV application panel content that corresponds to a live TV application and the application panel input received (a processor controlling the video display to execute a control program formulated in a particularly concise language and controlling the display of menus and the like. Menus are displayed as overlays onto a live motion video image

As to claim 10, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein determining the live TV application panel content of the method further comprises: referring to rules stored in a memory (the CPU may access control programs stored, for example, in the set top device system memory 45 so as to be accessible to the processor, for controlling the display of visual images by said video display device, column 8, lines 34-39), wherein the rules include one or more application panel content fields mapped to at least one live TV application panel content type (a human observer may cause a processor controlling the video display to execute a control program formulated in a particularly concise language (rules) and controlling the display of menus (TV application panel), Abstract); comparing a live TV application panel content type associated with the presented live TV broadcast content with the one or more mapped application panel content fields (a processor controlling the video display to execute a control program formulated in a particularly concise language and controlling the display of menus and the like. Menus are displayed as overlays onto a live motion video image, Abstract); determining select application panel content fields from the one or more mapped application panel content fields (The application begins by displaying Card1. The title of the Card is "Menu 1" and the selectable items are "Weather" (Selection A) and "Sports" (Selection B). If "Weather" is selected, it creates Card2, since this is the action in the "Selection A" line. Card2 is a flow card which immediately displays Card3 since the condition "1=-1" is true, column 37, line 52 through column 38, line 2); and including the select application panel content fields in the live TV application panel content for retrieval (selecting "Menu" (select application panel) will take an observer to the screen of FIG. 17, where the video stream images is displayed in a minor portion of the available screen area (the up

As to claim 11, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein the live TV application panel content is retrieved from two or more signal sources (the video stream images (source 1) is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices (source 2), column 41, lines 33-38).

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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US13/55493

#### Supplemental Box

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As to claim 12, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein the at least one source is at least one of a local memory, a remote memory, a broadcast signal, and a memory located across a network (The television receiver may be one configured to receive broadcast signals of NTSC or PAL standards, column 4, lines 62-64).

As to claim 13, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein at least one of the live TV application panel content and the live TV application panel is at least partially transparent, and wherein the presented live TV broadcast content is visible beneath the presented live TV application panel content (a user may cause a first level of menu to appear in overlay over the video stream and where the comparator may also be used to provide a pixel plane effect, to give transparent colors (partially transparent), column 37, lines 61-62 and column 19, lines 43-46).

As to claim 14, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein a size of the first portion is maintained upon presenting the live TV application panel content via the second portion of the display (a major portion (size) of the available field is occupied by the video stream image the image of a weather map, partially obscured in FIGS. 14 and 15 by the overlain menus and informational text while a minor portion (size) is occupied by the displayed menu(s), Figure 13, column 41, lines 1-5).

As to claim 15, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein the application panel input is provided via an input device associated with the intelligent TV information (the remote control functions enables use of the embodied icons such as the iconic representations of "channel up" or "channel down" found in remote control functionality for navigation among programming choices, Figures 17 and 18, column 41, lines 27-33).

As to claim 16, Bertram discloses the tangible, non-transitory computer readable medium of claim 9, wherein the presented live TV broadcast content includes at least one of a movie, a TV program, a sport event, a TV special, and a radio program (The application begins by displaying Card1. The title of the Card is "Menu 1" and the selectable items are "Weather" Selection A and "Sports" Selection B, Figures 17 and 18, column 37, lines 62-66).

As to claim 17, Bertram discloses the tangible, non-transitory computer readable medium of claim 16, wherein the presented live TV application panel content includes at least one of a program description, a channel identifier, a thumbnail graphic, an electronic program guide (EPG), and preference information (the remote control functions enables use of the embodied icons (thumbnail graphic) such as the iconic representations of "channel up" or "channel down" (channel identifier) found in remote control functionality for navigation among programming choices. However, by selecting "List" or "Menu", other services may be accessed, Figures 17 and 18, column 41, lines 27-33).

As to claim 18, Bertram discloses a system, comprising: an intelligent television (TV) having a display and a tuner, wherein the tuner is configured to receive and convert broadcast content signals to be displayed by the display (set top boxes which may be in the form of cable tuner systems, column 4 lines 28-34); an input device associated with the intelligent TV (set top devices used as accessories to television receivers may be incorporated directly into which are here called intelligent television receivers, column 33, lines 29-33); a memory (the processor 39 is operatively connected with system memory 45, column 6, lines 58-59); and a microprocessor operable to (a microprocessor 48 functioning as a central processing unit or CPU, column 6, lines 59-60); present, via a display of an intelligent television (TV) (set top devices used as accessories to television receivers may be incorporated directly into which are here called intelligent television receivers, column 33, lines 29-33), live TV broadcast content, wherein the live TV broadcast content is presented to a first portion of the display (the video stream images is displayed in a minor portion of the available screen area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices, Figure 17, column 41, lines 34-39); receive an application panel input at the intelligent TV, wherein the application panel input corresponds to at least one of a categories input, a favorites input, and a search input (When viewed channels or signal sources are thus constructed into a list, the list may be named such as "Fri Night" for favorite programs (favorites input) viewed that evening or "Kids" for programming specifically selected by or for children (categories input) and saved in system memory. Figure 17, column 41, lines 42-47); determine, by a processor associated with the intelligent TV and in response to receiving the application panel input, live TV a

-\*\*\*-Continued Within the Next Supplemental Box-\*\*\*-

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### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No

PCT/US13/55493

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As to claim 19, Bertram discloses the system of claim 18, wherein the microprocessor is further operable to: refer to rules stored in a memory (the CPU may access control programs stored, for example, in the set top device system memory 45 so as to be accessible to the processor, for controlling the display of visual images by said video display device, column 8, lines 34-39), wherein the rules include one or more application panel content fields mapped to at least one live TV application panel content type (a human observer may cause a processor controlling the video display to execute a control program formulated in a particularly concise language (rules) and controlling the display of menus (TV application panel), Abstract); compare a live TV application panel content type associated with the presented live TV broadcast content with the one or more mapped application panel content fields (a processor controlling the video display to execute a control program formulated in a particularly concise language and controlling the display of menus and the like. Menus are displayed as overlays onto a live motion video image, Abstract); determine select application panel content fields from the one or more mapped application panel content fields (The application begins by displaying Card 1. The title of the Card is "Menu 1" and the selectable items are "Weather" (Selection A) and "Sports" (Selection B). If "Weather" is selected, it creates Card2, since this is the action in the "Selection A" line. Card2 is a flow card which immediately displays Card3 since the condition "1=-1" is true, column 37, line 52 through column 38, line 2); and include the select application panel content fields in the live TV application panel content for retrieval (selecting "Menu" (select application panel area (the upper right hand corner) almost as if it were a so-called "picture in picture", with the remainder of the viewing field being occupied by listing of available choices, column 41, lines 33-38).

As to claim 20, Bertram discloses the system of claim 18, wherein at least one of the live TV application panel content and the live TV application panel is at least partially transparent, and wherein the presented live TV broadcast content is visible beneath the presented live TV application panel content (a user may cause a first level of menu to appear in overlay over the video stream and where the comparator may also be used to provide a pixel plane effect, to give transparent colors (partially transparent), column 37, lines 61-62 and column 19, lines 43-46).

Claims 1-20 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

Form PCT/ISA/237 (Supplemental Box) (July 2011)

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NOTIFICATION CONCERNING
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(CHAPTER I OF THE PATENT COOPERATION
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GRUBER, Kristen
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1560 Broadway
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Denver, CO 80202
ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year)
26 February 2015 (26.02.2015)

Applicant's or agent's file reference 6583-481-PCT

IMPORTANT NOTICE

International application No. PCT/US2013/055509

International filing date (day/month/year)
19 August 2013 (19.08.2013)

Priority date (day/month/year)
17 August 2012 (17.08.2012)

Applicant

FLEXTRONICS AP, LLC

The International Bureau Cooperation Treaty)	transmits he	rewith a copy	of the i	international	preliminary	report on	patentability	(Chapter I of	the Patent

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Lingfei Bai

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# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 6583-481-PCT	FOR FURTHER ACTION	See item 4 below			
International application No. PCT/US2013/055509	International filing date (day/month/year) 19 August 2013 (19.08.2013)	Priority date (day/month/year) 17 August 2012 (17.08.2012)			
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237					
Applicant FLEXTRONICS AP, LLC					

1.	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).			
2.	This RE	PORT consists of a tota	al of 7 sheets, including this cover sheet.	
			rence to the written opinion of the International Searching Authority should be read as a eliminary report on patentability (Chapter I) instead.	
3.	This repo	ort contains indications	relating to the following items:	
	$\boxtimes$	Box No. I	Basis of the report	
		Box No. II	Priority	
		Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	
		Box No. IV	Lack of unity of invention	
	$\boxtimes$	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	
		Box No. VI	Certain documents cited	
	$\mathbf{X}$	Box No. VII	Certain defects in the international application	
		Box No. VIII	Certain observations on the international application	
4.	but not,		ommunicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 cant makes an express request under Article 23(2), before the expiration of 30 months from .	

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Lingfei Bai
Facsimile No. +41 22 338 82 70	e-mail: pt02.pct@wipo.int

Form PCT/IB/373 (January 2004)

### PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY	,	,
To: Kristen Gruber Sheridan Ross P.C. 1560 Broadway Suite 1200 Denver, Colorado 80202 United States of America	PCT  WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY  (PCT Rule 43bis.1)	
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	Date of mailing (day/month/year)	0 8 NOV 2013
Applicant's or agent's file reference 6583-481-PCT	FOR FURTHER A	CTION See paragraph 2 below
International application No. International filing dat	e (day/month/year)	Priority date (day/month/year)
PCT/US13/55509 19 August 2013 (1	9.08.2013)	17 August 2012 (17.08.2012)
International Patent Classification (IPC) or both national classific IPC(8) - H04N 5/445, 71/73; G06F 13/14 (2013.01) USPC - 725/43, 45, 47	ation and IPC	
Applicant Flextronics AP, LLC		
1. This opinion contains indications relating to the following its Box No. 1 Basis of the opinion  Box No. II Priority  Box No. III Non-establishment of opinion with reg  Box No. IV Lack of unity of invention  Box No. V Reasoned statement under Rule 42bis. 1 citations and explanations supporting s  Box No. VI Certain documents cited  Box No. VII Certain defects in the international app  Box No. VIII Certain observations on the internation  2. FURTHER ACTION  If a demand for international preliminary examination is made international Preliminary Examining Authority ("IPEA") exception of this international Searching Authority will not be If this opinion is, as provided above, considered to be a written a written reply together, where appropriate, with amendment PCT/ISA/220 or before the expiration of 22 months from the For further options, see Form PCT/ISA/220.	ard to novelty, inventiv  (a)(i) with regard to not uch statement  lication al application  le, this opinion will be competed that this does not aportified the International es occupied.  en opinion of the IPEA, s, before the expiration	considered to be a written opinion of the oply where the applicant chooses an Authority I Bureau under Rulc 66.1 bis(b) that written the applicant is invited to submit to the IPEA of 3 months from the date of mailing of Fom
Name and mailing address of the ISA/US  Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1460, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	•	Authorized officer: Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US13/55509

Box	No. I	Basis of this opinion
1.	With r	egard to the language, this opinion has been established on the basis of:
	$\boxtimes$	the international application in the language in which it was filed.
		a translation of the international application into which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2.		This opinion has been established taking into account the ectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3.		egard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been shed on the basis of a sequence listing filed or furnished:
		eans)
		on paper
	. $\square$	in electronic form
	b. (tir	n
	F	in the international application as filed  together with the international application in electronic form
	F	subsequently to this Authority for the purposes of search
4.		In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required
		statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5.	Additio	onal comments:
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Form PCT/ISA/237 (Box No. I) (July 2011)

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US13/55509

Statement			
Novelty (N)	Claims	2, 3, 8, 10, 12, 13, 18, 20	YES
•	Claims	1, 4-7, 9, 11, 14-17, 19, 21, 22	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-22	NO
Industrial applicability (IA)	Claims	1-22	YES
	Claims	NONE	. NO

#### 2. Citations and explanations

Claims 1, 4-7, 9, 11, 14-17, 19, 21 and 22 lack novelty under PCT Article 33(2) as being anticipated by US 7,900,228 B2 to Stark et al. (hereinafter 'Stark').

As per claims 1, 11 and 21, Stark discloses a method of displaying content on a television, a non-transitory computer readable information storage medium having stored thereon instructions that cause a computing system to execute a method of displaying content on a television, and a system for displaying content on a television (a graphical user interface ("GUI") for a content management system is provided, such as to present television program information and/or information associated with other forms of multimedia content; abstract figure 1; column 2, lines 41-50; column 5, lines 48-64), comprising: receiving an indication associated with a selection by a user (one or more users may make various types of selections that affect the information being displayed; abstract; column 2, lines 51-56); determining, based on the received indication, a global panel to display via the television (in some situations various techniques are employed to maintain a state of the GUI (global panel) that is focused on one or more current selections as changes occur, such as to coordinate information display between multiple distinct information panes or other view areas of the GUI, to alter the information to be displayed in the GUI based on a selected piece of content, and/or to enable identification of a selected piece of content from within a large number of pieces of content; abstract; column 2, lines 51-61); retrieving from memory, a first content information for display in the global panel (the computing system 300 interacts with the media center 350 in a variety of ways (e.g., via a direct connection, as part of local network 385, or as part of another network, not shown), including to receive information about current and/or future television programming related content 360a and/or other content 360a; in the illustrated embodiment, the computing system includes a CPU 305 or other processor(s), various I/O devices 310, storage 320, and memory 330, and the illustrated I/O devices include a display 311, a network connection 312, a computer-readable media drive 313, and other I/O devices 315; an embodiment of the CM system 335 is executing in memory 330; the CM system provides information about the available content to one or more users (e.g., one or more of the consumers in the home environment), such as via a GUI (global panel) that is displayed on the display device 311 and/or on one or more of the content presentation devices 370 or 380 or other computing systems 390; figure 1; column 6, lines 3-38); and displaying, via the television, the retrieved content information in the specified global panel (the home environment includes an STB or other media center 350 receiving external content 360a that is available to one or more consumers in the home environment 395, such as television programming-related content 360a for presentation on a television 370; in the illustrated embodiment, the CM system does not itself present the external content 360a to the user(s), instead interacting with the media center 350 to control the display of the content to the user via the TV and/or one or more of the other content presentation devices; figure 1; column 2, lines 41-64; column 5, lines 53-58; column 6, lines 31-38,

As per claims 4 and 14, Stark discloses the method of claim 1 and the non-transitory computer-readable medium of claim 11, further comprising: receiving a second indication associated with a selection by a user (the primary content-type navigation tab for "Television" 110a (the first indication) continues to be currently selected, the secondary content type-specific navigation tab for "Live TV" 115a (second indication) continues to be currently selected; figure 3; column 10, lines 11-24); determining, based on the second indication, a source of content information to be displayed in the global panel (click the Guide View button to display a TV Guide-like grid of program bubbles; click the arrow next to the Guide View button to display the menu; figure 3; column 42, lines 15-35) based; retrieving at least a portion of content information from the determined source (menu selections are small, medium, or large; if you select Small, the program bubbles in the TV grid will show only the program title; by selecting Medium, the program bubbles expand to display information about the programs; by selecting Large, the program bubbles expand to display the maximum amount of information about the programs; figure 3; column 42, lines 15-40); and displaying, via the television, the content information associated with the determined source (the GUI is displaying program listing information for live TV in a view area 140; figures 2, 3; column 9, lines 34-37; column 10, lines 11-24).

As per claim 5, Stark discloses the method of claim 1, wherein the global panel comprises information from at least two different panel types (in some situations, the GUI (global panel) displays various types of information about multiple pieces of content that are currently appropriate for display, such as based on those pieces of content having presentation times or other associated times that correspond to a currently selected time period and/or based on those pieces of content having other appropriate characteristics; as one example, in at least some embodiments the metadata information displayed in a single view area for multiple pieces of content may be displayed using different types of views; abstract; column 2, lines 65-67 to column 3, lines 1-66).

-\*\*\*-Continued Within the Next Supplemental Box-\*\*\*-

Form PCT/ISA/237 (Box No. V) (July 2011)

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US13/55509

Box No. VI	I Certain	defects in	the international	application
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The following defects in the form or contents of the international application have been noted:

Defect: Claims Defective:

Claims 4 and 14 are objected to under PCT Rule 66.2(a)(iii) as containing the following defect(s) in the form or contents thereof: the word "based" in line 4 of claim 4, and line 5 of claim 14, should be stricken.

Claim 16 is objected to under PCT Rule 66.2(a)(iii) as containing the following defect in the form or contents thereof: claim 16 should depend on claim 11 instead of claim 1.

Form PCT/ISA/237 (Box No. VII) (July 2011)

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US13/55509

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

\*\*\*\*-Continued from Box V: Citations and Explanations-\*\*\*-

As per claims 6, 16 and 22, Stark discloses the method of claim 1, the non-transitory computer-readable medium of claim 11, and the system of claim 21, further comprising: identifying at least one of a content source and a content information currently being displayed via a television (in at least some embodiments the CM system GUI displays information such that a state of the GUI is focused based on one or more purcent selections; for example, in some embodiments one or more pinces of content may be currently selected (e.g., based on one or more pinces of contents such as by simultaneously displaying various types of information related to the currently selected pieces of content, such as by simultaneously displaying various types of information related to the currently selected pieces of content in a coordinated manner in multiple distinct display areas of the GUI; column 4, lines 5-24); selecting a panel type based on the identified at least one of content source and content information currently being displayed via the television (in addition, when such information in one or more such display areas of the GUI changes, the changed information may also be displayed in such a manner as to include or emphasize a currently selected piece of content on which the GUI state is focused (e.g., when possible, such as when the changed information includes information for the currently selected piece of content to be included in the changed information); column 4, lines 53-61); retrieving, from memory, content information based on the selected panel type (an embodiment of the CM system 335 is executing in memory 330; the CM system may, for example, provide some or all of the stored content metadata 322 to the users and allow the user to manipulate the content in a variety of ways (e.g., to select content for current presentation, for future recording, etc.), as well as in some embodiments maintaining a state of the GUI as displayed information changes; column 6, lines 31-43); and displaying, via the television, the retr

As per claims 7 and 17, Stark discloses the method of claim 6 and the non-transitory computer-readable medium of claim 16, further comprising: receiving a second indication associated with a selection by a user (the primary content-type navigation tab for "Television" 1/0a (the first indication) continues to be currently selected, the secondary content type-specific navigation tab for "Live TV" 1/15a (second indication) continues to be currently selected; figure 3; column 10, lines 11-24); selecting a panel type based on the second indication (the user clicks the LIVE TV tab 1/5a (panel type); figure 3; column 10, lines 21-23; column 42, lines 15-30); retrieving, from memory, content information based on the selected panel type and the second indication (an embodiment of the CM system is executing in memory 3/00; the CM system may, for example, provide some or all of the stored content metadata 3/22 to the users and allow the user to manipulate the content in a variety of ways (e.g., to select content for current presentation, for future recording, etc.), as well as in some embodiments maintaining a state of the GUI as displayed information changes; multimedia content metadata is received, such as if the computing system 300 receives EPG metadata information (i.e., as part of television programming-related content 3/60a) from a head-end and stores the information as content metadata 3/22 in the storage unit 3/20; column 6, lines 31-43; column 24, lines 3/1-3/6); and displaying, via the television, the retrieved content information in the global panel (when the user clicks the LIVE TV tab, the Navigation tabs Guide View screen appears and the GUI is rendered on a suitable display device; figure 3; column 24, lines 3/60; column 42, lines 15-30).

As per claims 9 and 19, Stark discloses the method of claim 7 and the non-transitory computer-readable medium of claim 17, wherein the retrieved content information comprises information associated with content information recently viewed (the information area 155 includes information about the current status of selected content, including content being currently recorded (if any), recently recorded programs, and upcoming scheduled recordings; figure 16; column 16, lines 60-67 to column 17, lines 1-6).

As per claim 15, Stark discloses the non-transitory computer-readable medium of claim 11, further comprising retrieving from memory a second content information for display in the global panel (receiving metadata information for multiple television programs (first and second content information); identifying a first distinct group of the multiple television programs for a graphical user interface such that received meta data information for the first distinct group of television programs will be included in the graphical user interface, the first distinct group including multiple television programs that satisfy a search request of television programs and that are identified based at least in part on a corresponding first category of television programs; claim 1); and displaying, via the television, the retrieved first content information and the retrieved second content information in the specified global panel (displaying to a user of the computing device a graphical window that includes the graphical user interface, the graphical user interface having; multiple distinct display areas including a first display area and a second display area, such that metadata information for a first portion of the identified first distinct group of television programs is displayed in the first display area and metadata information for a selected television program is displayable in the second display area; claim 1).

identified group, the displayed graphical user interface having: multiple distinct display areas including a first display area and a second display area, such that metadata information for a first portion of the identified first distinct group of television programs is displayed in the first display area and metadata information for a selected television program is displayable in the second display area; claim 1).

-\*\*\*-Continued Within the Next Supplemental Box-\*\*\*-

Form PCT/ISA/237 (Supplemental Box) (July 2011)

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US13/55509

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

-\*\*\*-Continued from Previous Supplemental Box-\*\*\*-

Claims 2, 3, 12 and 13 lack an inventive step under PCT Article 33(3) as being obvious over Stark in view of US 8,166,511 B2 (GRIGGS).

As per claims 2 and 12, Stark discloses the method of claim 1 and the non-transitory computer-readable medium of claim 11. Stark does not disclose further comprising: identifying a user associated with the received indication; retrieving one or more settings associated with the identified user; retrieving, from memory, content information associated with the identified user; and displaying, via the television, the retrieved content information in the specified global panel. Griggs does disclose further comprising: identifying a user associated with the received indication (according to a preferred embodiment of the instant invention, an authorized user may access their account on the system server by a log-in process, whereby the user provides a unique user identification to identify themselves as an authorized user to the system; column 2, lines 50-54; claim 1); retrieving one or more settings associated with the identified user (once into the account, the user can preferably modify user preferences and preferably view other account information; column 2, lines 54-56; claim 1); retrieving, from memory, content information associated with the identified user (when a request is submitted from the control device 12, the display logic 16 creates a graphical display frame in its memory with the appropriate content; the display frame is sent to the streaming media mixer logic 13; figure 9; column 9, lines 62-65); and displaying, via the television, the retrieved content information in the specified global panel (the streaming media mixer logic 13 compresses the new combined display frame and sends the combine display frame to the viewing device 25; figure 9; column 9, lines 65-67 to column 10, lines 1-9). It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system of Stark with Griggs's teaching, because by doing so, Stark's content management system would have provided for programming that is tailored to individual consumers needs, and provide the flexibilit

As per claims 3 and 13, Stark discloses the method of claim 1 and the non-transitory computer-readable medium of claim 11. Stark does not disclose further comprising; identifying a user associated with the received indication; retrieving, from memory, one or more settings associated with the identified user; retrieving, from memory, content information associated with the identified user and the one or more settings associated with the user; and displaying, via the television, the retrieved content information in the specified global panel. Griggs does disclose further comprising: identifying a user associated with the received indication (according to a preferred embodiment of the instant invention, an authorized user may access their account on the system server by a log-in process, whereby the user provides a unique user identification to identify themselves as an authorized user to the system; column 2, lines 50-54; claim 1); retrieving, from memory, one or more settings associated with the identified user (once into the account, the user can preferably modify user preferences and preferably view other account information; column 2, lines 54-56; claim 1); retrieving, from memory, content information associated with the identified user and the one or more settings associated with the user (granting access to the user account via the Internet; selecting the customized programming schedules based on a determination that the separate device corresponds to the device indicator; transmitting, to the separate device, display data for displaying the customized programming schedule; column 9, lines 62-67 to column 10, lines 1-9; claim 1); and displaying, via the television, the retrieved content information in the specified global panel (the streaming media mixer logic 13 compresses the new combined display frame and sends the combine display frame to the viewing device 25; receiving, from the separate device, a selection signal for selecting one of the plurality of digital video programs; figure 9; column 9, lines

Claims 8, 10, 18 and 20 lack an inventive step under PCT Article 33(3) as being obvious over Stark in view of US 7,685,520 B2 to Rashkovskiy et al. (hereinafter 'Rashkovskiy').

As per claims 8 and 18, Stark discloses the method of claim 7 and the non-transitory computer-readable medium of claim 17. Stark does not disclose wherein the retrieved content information comprises information associated with content information marked as favorite. Rashkovskiy does disclose wherein the retrieved content information comprises information associated with content information marked as favorite (a graphical user interface 10 for implementing an electronic content guide includes a plurality of selectable category icons 12 represented as "virtual" file folders; each category icon 12 may be predefined or may be user definable; category icon 12a is provided for favorite programs; figure 1; column 1, lines 63-67 to column 2, line 1). It would have been obvious to a person of ordinary skill in the art at the time of the invention, to modify Stark's system and method with Rashkovskiy's user interface, because by doing so, Stark's platform would have been more user-friendly by enabling viewers to save a specific channel by marking it as a favorite.

As per claims 10 and 20, Stark discloses the method of claim 7 and the non-transitory computer-readable medium of claim 17. Stark does not disclose wherein the retrieved content information comprises information associated with content information marked as favorite and further comprises information associated with content information recently viewed. Rashkovskiy does disclose wherein the retrieved content information comprises information associated with content information marked as favorite and further comprises information associated with content information marked as favorite and further comprises information associated with content information marked as favorite and further comprises information associated with content information recently viewed (a graphical user interface 10 for implementing an electronic content guide includes a plurality of selectable category icon 12 represented as "virtual" file folders; each category icon 12 may be predefined or may be user definable; category icon 12a is provided for favorite programs; a plurality of programs 22 are listed as entries in two columns 20a and 20b; these programs 22 are either currently in progress or just beginning, in keeping with the selection of currently available programs, through the icon 12c, and favorites among currently available programs through the selection of the icon 14; thus, the X-Files program 22, runs from 7:00 to 9:00 as indicated by the indicia 18 and 19; the bar indicia 19 graphically indicates how much of the program has already been displayed or broadcast in the past using differently color indicia 18 and 19; figure 1; column 1, lines 63-67 to column 2, line 1; column 2, lines 53-63). It would have been obvious to a person of ordinary skill in the art at the time of the invention, to modify Stark's system and method with Rashkovskiy's user interface, because by doing so, Stark's platform would have been more user-friendly by enabling viewers to save a specific channel by marking it as a favorite, and a user would have been able

Claims 1-22 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

Form PCT/ISA/237 (Supplemental Box) (July 2011)

From the INTERNATIONAL BUREAU

## **PCT**

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)

(PCT Rule 44bis.1(c))

PEARSON, Kendria, E. Sheridan Ross P.C. 1560 Broadway Suite 1200 Denver, CO 80202 ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year)
26 February 2015 (26.02.2015)

Applicant's or agent's file reference 6583-488-PCT

IMPORTANT NOTICE

International application No. PCT/US2013/055303

International filing date (day/month/year)
16 August 2013 (16.08.2013)

Priority date (day/month/year)
17 August 2012 (17.08.2012)

Applicant

FLEXTRONICS AP, LLC

The International Bureau transf Cooperation Treaty)	mits herewith a copy of the inte	ernational preliminary report or	n patentability (Chapter I of the Patent

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Kihwan Moon

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# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 6583-488-PCT	FOR FURTHER ACTION	See item 4 below
International application No. PCT/US2013/055303	International filing date (day/month/year) 16 August 2013 (16.08.2013)	Priority date (day/month/year) 17 August 2012 (17.08.2012)
International Patent Classification (8t See relevant information in Form	h edition unless older edition indicated) PCT/ISA/237	
Applicant FLEXTRONICS AP, LLC		

1.			report on patentability (Chapter I) is issued by the International Bureau on behalf of the rity under Rule 44 $bis.1$ (a).
2.			otal of 6 sheets, including this cover sheet.  erence to the written opinion of the International Searching Authority should be read as a
			oreliminary report on patentability (Chapter I) instead.
3.	This rep	port contains indication	is relating to the following items:
	$\mathbf{X}$	Box No. I	Basis of the report
		Box No. II	Priority
		Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
		Box No. IV	Lack of unity of invention
	X	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
		Box No. VI	Certain documents cited
		Box No. VII	Certain defects in the international application
		Box No. VIII	Certain observations on the international application
4.	but not,		communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 licant makes an express request under Article 23(2), before the expiration of 30 months from 2).

Date of issuance of this report 17 February 2015 (17.02.2015) Authorized officer The International Bureau of WIPO 34, chemin des Colombettes Kihwan Moon 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70 e-mail: pt01.pct@wipo.int

Form PCT/IB/373 (January 2004)

#### PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY	
To: KENDRIA E. PEARSON SHERIDAN ROSS P.C. 1560 BROADWAY	PCT
SUITE 1200 DENVER, CO 80202	WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY
	(PCT Rule 43his.1)
	Date of mailing (day/month/year) 0 5 D E C 2013
Applicant's or agent's file reference 6583-488-PCT	FOR FURTHER ACTION  See paragraph 2 below
International application No. Internat	ional filing date (day/month/year) Priority date (day/month year)
PCT/US2013/055303 16 Aug	gust 2013 17 August 2012
International Patent Classification (IPC) or both na IPC(8) - H04N 7/173 (2013.01) USPC - 725/27 Applicant FLEXTRONICS AP, LLC	itional classification and IPC
Box No. IV Lack of unity of invention  Box No. V Reasoned statement und	ler Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; as supporting such statement  deternational application
International Preliminary Examining Authorit other than this one to be the IPEA and the chopinions of this International Searching Author If this opinion is, as provided above, consider a written reply together, where appropriate, w	amination is made, this opinion will be considered to be a written opinion of the y ("IPEA") except that this does not apply where the applicant chooses an Authority osen IPEA has notified the International Bureau under Rule 66.1bis(b) that written ority will not be so considered.  ed to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA ith amendments, before the expiration of 3 months from the date of mailing of Form nonths from the priority date, whichever expires later
Mail Stop PCT, Attn: ISA/US	Ovember 2013  Authorized officer:  Blaine R. Copenheaver  PCT Helpdosk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/055303

Box	No. I	Basis of this opinion
1.	With r	egard to the language, this opinion has been established on the basis of:
	$\boxtimes$	the international application in the language in which it was filed.
		a translation of the international application into which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2.		This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3.		egard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been shed on the basis of a sequence listing filed or furnished:
	a. (m	eans)
		on paper
	_	in electronic form
	b. (tir	ne)
		in the international application as filed
		together with the international application in electronic form
	L	subsequently to this Authority for the purposes of search
4.		In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5.	Additio	onal comments:
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Form PCT/ISA/237 (Box No. 1) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055303

Statement				
Novelty (N)	Claims	None		YES
Novelly (11)	Claims	1-20		NO
Inventive step (1S)	Claims	None		YES
	Claims	1-20		NO
Industrial applicability (IA)	Claims	1-20		YES
	Claims	None		NO
Citations and explanations:				
Supplemental Box				

Form PCT/ISA/237 (Box No. V) (July 2011)

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US2013/055303

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of

Clairns 1-20 lack novelty under PCT Article 33(2) as being anticipated by Yu et al., hereinafter referred to as Yu.

Regarding claims 1, 10, 16, Yu discloses a method for displaying content on a television (a user platform 140 comprises a television 142, para 0071; figs 17, 18 & 20 shows a method for the user to access television content items via a TV portal, abstract, para 0115, 0122), a non-transitory computer readable information storage medium having stored thereon instructions that cause a computing system to execute a method of displaying content on a television [claim 10] (the computer system 5600 includes a display, and the disk drive unit 5616 includes a non-transitory machine readable medium 5622 and stored on it are instructions and data e.g. software 5624 in a memory 5604 within the processor 5602 executed by the computer system, para 0228, 0229), a system for displaying content on a television. comprising: an input device associated with the television, a memory, and a microprocessor operable [claim 16] (the computer system 5600 includes a display, and the disk drive unit 5616 includes a non-transitory machine readable medium 5622 and stored on it are instructions, para 0228, 0229; figs 17, 18 & 20 shows a method wherein the television content is provided as a listing which can be accessed by the user by manipulating a conventional television remote control device by position the selection box 2022 around a desired accessed by the user by manipulating a conventional relevision remote control device by bosition the selection box 2022 around a desired TV content item [receiving a first directional input, para 0115, 0122) comprises receiving a first directional input via an input device associated with the television (a user platform 140 comprises a television 142, para 0071; figs 17, 18 & 20 shows the user access television content items via a TV portal, the television content is provided as a listing which can be accessed by the user by manipulating a conventional television remote control device by position the selection box 2022 around a desired TV content item [receiving a first directional input], para 0115, 0122; fig. 18 displays a content listing area 1820 [screen channel changer/ electronic program guide] which lists the available contents with the time slots which includes the programming channels, which the users can highlights/select a particular content using an input device which upon selection delivers the content, para 0119, 0123); determining, based on a first direction associated with the first directional input, a content panel to display via the television (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device, upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 [a content panel to display via the television] as shown in fig.21, para 0122); retrieving, from a memory, a first content information for displaying in the content panel (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device, upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 [the page 2100 provides 2114, 2112, 2122 and 2124 contents which are displayed interpreted as first content information for displaying in the content panel] as shown in fig.21, para 0122; fig.6 shows a data processor 111 causes the provision module 117 to retrieve the contents from the assets stored within the service provider database 112 and makes the content accessible to the interface device 644 [interpreted as retrieving, from a memory, a content information for displaying in the content panel] via the network 120, para 0060); identifying at least one of a content source and a second content information currently being displayed via the television (the display 2100 displays the button 2114, the button 2114 "Cast & Crew" being selected by the user [selecting by the user is interpreted as identifying the content source] upon which displays the screen 2200 of fig.22, para 0125); selecting a panel type based or the identified at least one of content source and second content information currently being displayed via the television (upon the user selecting the option of 2114 "Cast & Crew" [content source] on fig.21 the user is provided with a display 2200 which provides the users a cast page which represents detailed information 2222 related to the selected content item in this case is "Lost" television program (displaying the 2200 page which is square shaped panel including the contents 2222 upon the user selecting the 2114 is interpreted as selecting a panel type based on the identified content source], para 0125); retrieving, from memory, a third content information based on the selected panel type (upon the user selecting the option of 2114 "Cast & Crew" on fig.21 the user is provided with a display 2200 which provides the users with a cast page which represents detailed information 2222 [third content information] related to the selected content item in this case is "Lost" television program [displaying the 2200 page which is square shaped panel including the contents 2222 upon the user selecting the 2114 is interpreted as selecting a panel type based on the identified content source], para 0125; fig.6 shows a data processor 111 causes the provision module 117 to retrieve the contents from the assets stored within the service provider database 112 and makes the content accessible to the interface device 644 [interpreted as retrieving, from a memory, a content information for displaying in the content panel] via the network 120, para 0060); and displaying, via the television, the retrieved first content information and the third content information in the content panel based on the selected panel type (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device, upon selection of the desired TV content 2022 the user i presented with a TV content overview page 2100 [the page 2100 provides 2114, 2112, 2122 and 2124 contents which are displayed interpreted as first content information for displaying in the content panel] as shown in fig.21, para 0122; upon the user selecting the option of 2114 "Cast & Crew" on fig.21 the user is provided with a display 2200 which provides the users with a cast page which represents detailed information 2222 [third content information] related to the selected content item in this case is "Lost" television program [displaying the 2200 page which is square shaped panel including the contents 2222 upon the user selecting the 2114 is interpreted as selecting panel type based on the identified content source], para 0125; a user platform 140 comprises a television 142, para 0071; figs 17, 18 & 20 shows the user to access television content items via a TV portal, para 0115,0122).

Regarding claims 2, 11, 17, Yu further teaches comprising: retrieving, from a memory, a first image that is representative of the at least one of content source and second content information (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device, upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 [the page 2100 provides 2114, 2112, 2122 and 2124 contents which are displayed interpreted as a first image representative of a content source] as shown in fig.21, para 0122; fig.6 shows a data processor 111 causes the provision module 117 to retrieve the contents from the assets stored within the service provider database 112 and makes the content accessible to the interface device 644 [interpreted as retrieving, from a memory, a content information for displaying in the content panel] via the network 120, para 0060); and displaying, via the television, the first image in the content panel (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device, upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 [the page 2100 provides 2114, 2112, 2122 and 2124 contents which are displayed] as shown in fig.21, para 0112; a user platform 140 comprises a television 142, para 0071; figs 17, 18 & 20 shows the user to access television content items via a TV portal. para 0115,0122).

Form PCT/ISA/237 (Supplemental Box) (July 2011)

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/055303

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Regarding claims 3, 12, 18, Yu further teaches wherein the content panel is an application panel (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device, upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 [the page 2100 provides 2114, 2112, 2122 and 2124 contents which are displayed interpreted as application panel] as shown in fig.21, para 0122; fig. 18 displays a content listing area 1820 which lists the available contents with the time slots which includes the programming channels, which the users can highlights/select a particular content [application panel] using an input device which upon selection delivers the content, para 0119, 0123).

Regarding claim 4, Yu further teaches comprising: receiving a second directional input via the input device (a user platform 140 comprises a television 142, para 0071; figs 17, 18 & 20 shows the user access television content items via a TV portal, the television content is provided as a listing which can be accessed by the user by manipulating a conventional television remote control device by position the selection box 2022 around a desired TV content item (receiving a first directional input), further the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device (receiving a second directional input), upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 as shown in fig.21, para 0115, 0122); and determining, based on a second direction associated with the second directional input, a second content panel to display via the television (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device (receiving a second directional input), upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 [second content panel to display] as shown in fig.21, para 0115, 0122).

Regarding claims 5, 14, 19, Yu further teaches comprising: receiving a second directional input via the input device (a user platform 140 comprises a television 142, para 0071; figs 17, 18 & 20 shows the user access television content items via a TV portal, the television content is provided as a listing which can be accessed by the user by manipulating a conventional television remote control device by position the selection box 2022 around a desired TV content item [receiving a first directional input], further the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device [receiving a second directional input], upon selection of the desired TV content 2022 the user is presented with a TV content overview page 2100 as shown in fig.21, para 0115, 0122); determining, based on a second direction associated with the second directional input, a source of at least one content information to be displayed in the content panel based on the selected panel type (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device [receiving a second directional input], upon selection of the desired TV content 2022 which in this case is LOST TV program, the user is presented with a TV content overview page 2100 which provides information on the "Lost" TV program [interpreted as determining a source of a content information displayed], as shown in fig.21, para 0115, 0122); retrieving at least a portion of the at least one content information from the determined source (fig.6 shows a data processor 111 causes the provision module 117 to retrieve the contents from the assets stored within the service provider database 112 and makes the content accessible to the interface device 644 [interpreted as retrieving, from a memory, a content information for displaying in the content panel] via the network 120, para 0060); and displaying, via the television, the content information associated with the determined source (the user selects the listed TV content by the selection box 2022 by activating a selection button on a remote control device [receiving a second directional input), upon selection of the desired TV content 2022 which in this case is LOST TV program, the user is presented with a TV content overview page 2100 which provides information on the "Lost" TV program [interpreted as determining a source of a content information displayed], as shown in fig.21, para 0115, 0122).

Regarding claims 6, 13, 20, Yu further teaches wherein the third content information comprises information associated with content information marked as favorite (upon the user selecting the option of Bookmark 2124 [third content information] on fig.21 the user is enabled to add the content item to a list of favorite content items [content information marked as favorite] and further can also bookmark the content item for easy access, para 0125).

Regarding claim 7, Yu further teaches wherein the third content information comprises information associated with TV series episode content information (upon the user selecting the option of 2114 "Cast & Crew" on fig.21 the user is provided with a display 2200 which provides the users with a cast page which represents detailed information 2222 [third content information] related to the selected content item in this case is "Lost" television program, and further displays "show synopsis" option which provides details of the television program LOST [TV series episode content information], para 0125).

Regarding claim 8, Yu further teaches wherein the selected panel type is a search panel (figs.33, 34 & 35 shows on the display 3300 the user selects the search option 1715, and is presented with the search panel 3400, where the user types in the search terms 3422 and searches, para 0139, 0140).

Regarding claim 9, Yu further teaches wherein the selected panel type is a recommended panel (figs.33, 34 & 35 shows on the display 3300 the user selects the search option 1715, and is presented with the search panel 3400, where the user types in the search terms 3422 and searches, further based on the search query the user is provided with suggestions in the suggestions box 3424 [recommended panel], page 0.139, 0.140).

Regarding claim 15, Yu further teaches wherein the third content information comprises information associated with TV series episode content information (upon the user selecting the option of 2114 "Cast & Crew" on fig.21 the user is provided with a display 2200 which provides the users with a cast page which represents detailed information 2222 [third content information] related to the selected content item in this case is "Lost" television program, and further displays "show synopsis" option which provides details of the television program LOST [TV series episode content information], para 0125), and wherein the selected panel type is an info panel associated with the TV series episode content information (fig.18 shows the TV content listing with the option 1826 which the user activates by selecting, upon which the user is presented with the window 2100 on fig.21 which provides the user with the "show synopsis" option which provides details of the television program LOST [TV series episode content information], para 0123, 0125).

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry

Form PCT/ISA/237 (Supplemental Box) (July 2011)

### PATENT COOPERATION TREATY

### From the INTERNATIONAL BUREAU

# PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)

(PCT Rule 44bis.1(c))

To:

REINHARDT, Dean, N. Sheridan Ross P.C. 1560 Broadway Suite 1200 Denver, CO 80202 ETATS-UNIS D'AMERIQUE



Date of mailing (day/month/year) 11 June 2015 (11.06.2015)

Applicant's or agent's file reference 6583-489-PCT

IMPORTANT NOTICE

International application No. PCT/US2013/055280

International filing date (day/mornh/year) 16 August 2013 (16.08.2013)

Priority date (day/month/year) 17 August 2012 (17.08.2012)

Applicant

FLEXTRONICS AP, LLC

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter | of the Patent Cooperation Treaty)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Philippe Bécamel

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Form PCT/IB/326 (January 2004)

# PATENT COOPERATION TREATY

# PCT

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 6583-489-PCT	FOR FURTHER ACTION	See item 4 below
	International filing date (doy/month/year) 16 August 2013 (16.08.2013)	Priority date (day/month/year) 17 August 2012 (17.08.2012)
International Patent Classification (8t See relevant information in Form	h edition unless older edition indicated) PCT/ISA/237	
Applicant FLEXTRONICS AP, LLC		

postanenna		55000000000000000000000000000000000000						
1.	This in Interna	This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).						
2.	This R	EPORT consists of a t	otal of 8 sheets, including this cover sheet.					
	In the a	attached sheets, any re ce to the international	ference to the written opinion of the International Searching Authority should be read as a preliminary report on patentability (Chapter I) instead.					
3.	This re	port contains indicatio	ns relating to the following items:					
	$\boxtimes$	Box No. I	Basis of the report					
		Box No. II	Priority					
		Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability					
		Box No. IV	Lack of unity of invention					
	$\boxtimes$	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
		Box No. VI	Certain documents cited					
		Box No. VII	Certain defects in the international application					
		Box No. VIII	Certain observations on the international application					
4.	but not	ernational Bureau will , except where the app ority date (Rule 44 <i>bis</i> .	communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 dicant makes an express request under Article 23(2), before the expiration of 30 months from 2).					
			Date of issuance of this report					

02 June 2015 (02.06.2015) Authorized officer The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Philippe Bécamel Facsimile No. +41 22 338 82 70 e-mail: pt03.pct@wipo.int

Form PCT/IB/373 (January 2004)

# PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORIC	TY	
To: DEAN N. REINHARDT SHERIDAN ROSS P.C. 1560 BROADWAY SUITE 1200	WR	PCT
DENVER, CO 80202	INTERNATION	ONAL SEARCHING AUTHORITY
		(PCT Rule 43bis.1)
	Date of mailing (day/month/year)	1 0 JAN 2014
Applicant's or agent's file reference 6583-489-PCT	FOR FURTHER A	CTION see paragraph 2 below
International application No. Int	ternational filing date (day/month/year)	Priority date (day/month/year)
PCT/US2013/055280 16	6 August 2013	17 August 2012
International Patent Classification (IPC) or bo IPC(8) - H04N 7/173 (2013.01) USPC - 725/27	oth national classification and IPC	
Applicant FLEXTRONICS AP, LLC		,
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This opinion contains indications relating     Box No. 1 Basis of the opinion		
Box No. II Priority  Box No. III Non-establishment	t of opinion with regard to novelty, inventive	sten and industrial applicability
Box No. IV Lack of unity of in		
Box No. V Reasoned statemer	nt under Rule 43bis. I(a)(i) with regard to nove mations supporting such statement	elty, inventive step or industrial applicability;
Box No. VI Certain documents	s cited	
Box No. VII Certain defects in	the international application	
Box No. VIII Certain observatio	ons on the international application	
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I International Preliminary Examining Air	thority ("IPEA") except that this does not applied the Internation.	e considered to be a written opinion of the ply where the applicant chooses an Authority al Bureau under Rule 66.1 bis(b) that written
a written reply together, where appropria	asidered to be a written opinion of the IPEA, ate, with amendments, before the expiration of 22 months from the priority date, whicheve	the applicant is invited to submit to the IPEA of 3 months from the date of mailing of Form respires later.
For further options, see Form PCT/ISA/		
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	tate of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	25 December 2013	Blaine R. Copenheaver PCT Helpdesk: \$71:272-4300 PCT GSP: \$71-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/055280

Box No. I Basis of this	pinion		***************************************	
the international a translation of t	nage, this opinion has been es application in the language in the international application in shed for the purposes of inter-	n which it was filed.	which i	s the language of a
	been established taking into a under Rule 91 (Rule 43bis, 1)		of an obvious mistake	authorized by or notified
With regard to any nucl established on the basis	eotide and/or amino acid se of a sequence listing filed or	quence disclosed in the furnished:	international application	m, this opinion has been
a. (means)  on paper  in electronic	form		•	
b. (time)				
	tional application as filed the international application	in electronic form	S	
(manual)	to this Authority for the purp	4		
statements that the	e case that more than one vers ne information in the subsequend the application as filed, as	ent or additional copies	is identical to that in the	or furnished, the required ne application as filed or
5. Additional comments:				
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Form PCT/ISA/237 (Box No. 1) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2013/055280

	atement under Rule 4 I explanations suppor	i3 <i>bis</i> .1(a)(i) with regard to novelty, inventi rting such statement	eve step or moustrist apparcability;
1. Statement			•
Novelty (N)	Claims	8	YES
	Claims	1-7, 9-20	NO NO
Inventive step (IS)	Claims	None	YES
	Claims	1-20	NO NO
Industrial applicabil	ity (IA) Claims	1-20	YES
	Claims	None	NO

#### Citations and explanations:

Claims 1-7, 9-20 lack novelty under PCT Article 33(2) as being anticipated by Yu et al., hereinafter referred to as Yu.

Regarding claims 1, 17, Yu discloses a non-transitory computer readable storage medium having stored thereon instructions that cause a processor to execute [claim 1] (a computer implemented system and method for using a processor to execute a browser engine and a machine or computer instructions used to cause a processor which is programmed with the instructions to perform various steps, abstract, para 0235, 0229) a method of displaying a media center panel on a television display, the method comprising the steps of [claim 1] (figs. 1 & 2 shows a user platform 440 for receiving content information, and the user platform working and selection user interface which includes a root page 1900 which shows a command option area 1710 wherein a user selects a TV command option 1713 which enables the user to view a television content portal 2000 [displaying a media center panel] displayed in fig.20, para 0115, 0121) a method for organizing media item metadata on a television, the method comprising [claim 17] (figs. 1 & 2 shows a user platform which enables the user to view a television content portal 2000 [displaying a media center panel] displayed in fig.20, para 0115, 0121) a method for organizing media item metadata on a television (TV) 142, a personal computer 142, para 0056; fig.17 shows a user platform which displays a content browsing and selection user interface which includes a root page 1900 which shows a command option area 1710 wherein a user selects a TV command option 1713 which enables the user to view a television content portal 2000 which includes media contents [organizing media item metadata] displayed in the content area 2020 in fig.20, para 0115, 0121); receiving a request to activate the media center panel (the user selects) the command option 1713 on the command option 1713 on the command option 1713 on the command option area 1710, and in response to the user selecting the TV command option 1713 on the command option area 1710, and in response to the user in the command option area 1710, and in re

Form PCT/ISA/237 (Box No. V) (July 2011)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US2013/055280

#### Supplemental Box

in case the space in any of the preceding boxes is not sufficient.

Regarding claim 12, A television system, comprising: a display; a memory; a processor in communication with the memory and the display (a computer implemented system and method for using a processor to execute a browser engine and a machine or computer instructions used to cause a processor which is programmed with the instructions to perform various steps, abstract, para 0235, 0229; figs. 1 & 2 shows a user platform 140 for receiving content information, and the user platform comprises a television (TV) 142, a personal computer 142, para 0056; fig.17 shows a user platform which displays a content browsing and selection user interface which includes a root page 1900 which shows a command option area 1710 wherein a user selects a TV command option 1713, para 0121), the processor operable to: to: receive a request to activate a media center panel (the user selects the command option 1713 on the command option area 1710, and in response to the user selecting the TV command option 1713 (receiving a request to activate) from the root page 1900 the system displays a TV portal 2000 [activate the media center panel] shown in the fig 20, para 0121, 0122; fig. 26 shows the user selects a movies of the user selecting the TV command option 1713 (receiving a request to activate) from the root page 1900 the system displays a TV portal 2000 [determining a type of media center panel] shown in the fig.20, para 0121, 0122; fig. 26 shows the user selects a movies option on the command option area 1710 and upon the selection the system displays 2700 [determining a type of media center panel] shown in the fig.20 para 0131, 0132; fig. 26 shows the user selects a movies option on the command option area 1710 and upon the selection the system displays 2700 [determining a type of media center panel] with a list of movies in fig.27 [based on the type of option selected by the user in the command option area a corresponding display panel is displayed interpreted as determining a type of media center panel requested), para 0130, 0131), re

Regarding claim 2, Yu further teaches wherein the type of media center panel comprises at least one of, an information panel; a favorite panel; a last viewed panel; a most viewed panel; a search panel; and a new panel (figs.33-35 shows a root page 3300 wherein a user highlights a command option 1715 "Search" command option area 1710 of the root page 3300 [a search panel], and the search command anables the user to search particular content items by using a user generated search query, and fig.35 shows a search result 3521, para 0139, 0140).

Regarding claim 3, Yu further teaches wherein the metadata comprises at least one of: a thumbnali; a title; a description; a rating; and a run time (fig.20 shows once the TV portal 2000 is selected by the user the service provider 110 accesses a content catalog or content database 112 to obtain a listing of collections of content, content information and metadata associated with the television content for selection from the TV portal 2000, the contents displayed includes an image r textual description of the TV content item such as "Lost" [a thumbnali, a title] is displayed in the content item area 2020 [displaying on the television display retrieved metadata] and can be selected by using a selection box 2022, para 0084).

Regarding claim 4, 13, Yu further teaches further comprising: receiving a selection of a media item from one or more media items displayed in the media center panel (fig.20 shows once the TV portal 2000 is selected by the user, media contents are displayed which includes an image, textual description of the TV content item such as "Lost" is displayed in the content item area 2020 which is selected by using a selection box 2022, upon the selection the user is presented with a panel 2100 (receiving a selection of a media item), which provides a user selectable buttons 2124, 2122 and the button 2122 enables the user to watch the selected content item, para 0121, 0124); and presenting content associated with the selected media item (fig.20 shows once the TV portal 2000 is selected by the user, media contents are displayed which includes an image, textual description of the TV content item such as "Lost" is displayed in the content item area 2020 which is selected by using a selection box 2022 [presenting content associated with the selected media], upon the selection the user is presented with a panel 2100, which provides a user selectable buttons 2124, 2122 and the button 2122 enables the user to watch the selected content item, para 0121, 0124).

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. + PCT/US2013/055280

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Regarding claim 5, Yu further teaches comprising: receiving a request to activate a second media center panel (fig.20 shows once the TV portal 2000 is selected by the user, media contents are displayed which includes an image, textual description of the TV content item such as "Lost" is displayed in the content item area 2020 which is selected by using a selection box 2022 [receiving a request to activate a second media center panel), upon the selection the user is presented with a panel 2100, which provides a user selectable buttons 2124, 2122 and the button 2122 enables the user to watch the selected content item, pare 0121, 0124); determining the type of media center panel requested (fig.20 shows once the TV portal 2000 is selected by the user, media contents are displayed which includes an image, textual description of the TV content item such as "Lost" is displayed in the content item area 2020 which is selected by using a selection box 2022, upon the selection the user is presented with a panel 2100, which provides a user selectable buttons 2124, 2122associated with the selected media content [determining the type of media center panel] and the button 2122 enables the user to watch the selected content item, para 0121, 0124); retrieving, from memory, metadata based on the type of the second media center panel (fig.20 shows once the TV portal 2000 is selected by the user [based on the type of media center panel] the service provider 110 accesses a content catalog or content database 112 to obtain a listing of collections of content, content information and metadata associated [retrieving, from memory, metadata] with the television content for selection from the TV portal 2000, para 0084; fig.20 shows the content item area 2020 which is selected by using a selection box 2022, upon the selection the user is presented with a panel 2100, which provides a user selectable buttons 2124, 2122 associated with the selected centent item, para 0121, 0124); and displaying on the television display the retrieved metadat

Regarding claims 6, 16, Yu further teaches comprising: receiving a selection of a media item from one or more media items displayed in the second media center panel (fig.20 shows once the TV portal 2000 is selected by the user, content item such as "Lost" is displayed in the content item area 2020 which is selected by using a selection box 2022, upon the selection the user is presented with a panel 2100 [second media center panel], which provides a user selectable buttons 2124, 2122 associated with the selected media content and the button 2122 enables the user to watch (receiving a selection of a media item), listen or consume the selected content item, para 0121, 0124); and presenting content associated with the selected media item (upon the selection the user is presented with a panel 2100, which provides a user selectable buttons 2124, 2122 associated with the selected media content and the button 2122 enables the user to watch [enable the user to watch the content is interpreted as receiving a selection of a media item to present content associated), listen or consume the selected content item, para 0121, 0124).

Regarding claims 7, 14, Yu further teaches wherein the media center panel includes a list of one or more related media items (fig.23 shows a user interface panel 2300 which includes detailed information area 2320 related to the actor selected, the area 2320 includes content items/movies related [list of one or more related media items] to the actor selected, para 0126).

Regarding claim 9, Yu further teaches including retrieving, from a data subservice, metadata based on the type of media center panel requested (fig 20 shows once the TV portal 2000 is selected by the user (based on the type of media center panel) the service provider 110 accesses a content catalog or content database 112 to obtain a listing of collections of content, content information and metadata associated (retrieving, from data subservice metadata) with the television content for selection from the TV portal 2000, the contents displayed includes an image, textual description of the TV content item displayed in the content item area 2020, para 0084, 0121, 0122).

Regarding claim 10, Yu further teaches comprising after receiving the request to activate the media center panel: identifying a user associated with the request (the users can log into the accounts maintained by the system 200, a user profile/user identifier associated with the user to include user behavior information corresponding to a content information accessed by the user is stored in database 112, fig 20 shows a "For You" command option that displays a list of TV content items in the content item area 2020 that are likely of interest to a particular user based his profile [identifying a user associated with the request], para 0076, 0080, 0122); and retrieving metadate associated with the identified user from memory for display by the media center panel (fig 20 shows a "For You" command option that displays a list of TV content items (retrieving metadata associated) displayed in the content item area 2020 [display by the media center panel] that are likely of interest to a particular user/viewer based on a previously generated user profile and based on a historical pattern of previously viewed contents stored in a database 112, para 0080, 0122).

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/055280

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Regarding claim 11, Yu further teaches further comprising after receiving the request: determining whether the request is a first request to activate a media center panel from a current user interface (the user selects the command option 1713 on the command option area 1710, and in response to the user selecting the TV command option 1713 [receiving a request to activate] from the root page 1900 the system displays a TV portal 2000 [activate the media center panel] shown in the fig.20, once the TV portal 2000 is selected by the user, the service provider 110 accesses a content catalog or database 112 to obtain a listing of the collections of contents (after receiving the request determining a first request to activate a media center panell, content information associated with the television content and if the content items are not available in the content database 112 then pre-defined links are used to obtain the content items, para 0122) or if the request is not the first request to activate the media center panel from the current user interface; if the request is a first request: determining the type of media center panel requested (the user selects the command option 1713 on the command option area 1710, and in response to the user selecting the TV command option 1713 [receiving a request to activate] from the root page 1900 the system displays a TV portal 2000 [determining a type of media center panel] shown in the fig.20, para 0121, 0122; fig. 26 shows the user selects a movies option on the command option area 1710 and upon the selection the system displays 2700 (determining a type of media center panel) with a list of movies in fig 27 (based on the type of option selected by the user in the command option area a corresponding display panel is displayed interpreted as determining a type of media center panel requested], para 0130, 0131); retrieving, from memory, metadata based on the type of media center panel requested (fig.20 shows once the TV portal 2000 is selected by the user [based on the type of media center panel] the service provider 110 accesses a content catalog or content database 112 to obtain a listing of collections of content, content information and metadata associated (retrieving, from memory, metadata) with the television content for selection from the TV portal 2000, the contents displayed includes an image, textual description of the TV content item displayed in the content item area 2020, para 0084, 0121, 0122); and displaying on the television display the retrieved metadata in the media center panel (fig.20 shows once the TV portal 2000 is selected by the user the service provider 110 accesses a content catalog or content database 112 to obtain a listing of collections of content, content information and metadata associated with the television content for selection from the TV portal 2000, the contents displayed includes an image, textual description of the TV content item such as "Lost" is displayed in the content item area 2020 [displaying on the television display retrieved metadata] and can be selected by using a selection box 2022, para 0064, 0121, 0122); if the request is not the first request: determining the type of media center panel last displayed in the current user interface; retrieving, from memory, metadata based on the type of media center panel last displayed in the current user interface; and displaying on the television display the retrieved metadata in the media center panel.

Regarding claims 15, 18, Yu further teaches wherein the processor is further operable to: receive a second request to launch a second media center panel based on a media item selected from one or more media items displayed in the media center panel (fig.20 shows once the TV portal 2000 is selected by the user [a first request], media contents are displayed which includes an image, textual description of the TV content item such as "Lost" is displayed in the content item area 2020 which is selected by using a selection box 2022 [receiving a second request to launch a second media center panel], upon the selection the user is presented with a panel 2100, which provides a user selectable buttons 2124, 2122 and the button 2122 enables the user to watch the selected content item, para 0121, 0124); determine the type of media center panel requested (fig.20 shows once the TV portal 2000 is selected by the user, media contents are displayed which includes an image, textual description of the TV content item such as "Lost" is displayed in the content item area 2020 which is selected by using a selection box 2022, upon the selection the user is presented with a panel 2100, which provides a user selectable buttons 2124, 2122associated with the selected content (letermining the type of media center panel) and the button 2122 enables the user to watch the selected content item, para 0121, 0124); retrieve, from memory, metadata based on the type of the second media center panel (fig.20 shows once the TV portal 2000 is selected by the user [based on the type of media center panel] the service provider 110 accesses a content catalog or content database 112 to obtain a listing of collections of content, content information and metadata associated [retrieving, from memory, metadata] with the television content for selection from the TV portal 2000, para 0084, fig.20 shows the content item area 2020 which is selected by using a selection box 2022, upon the selection the user is presented with a panel 2100 [second media center pan

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2013/055280

#### Supplemental Box

In case the space in any of the preceding boxes is not sufficient. Continuation of:

Regarding claim 19, Yu further teaches, wherein the media center panel includes a first list of one or more related media items (fig.23 shows a user interface panel 2300 which includes detailed information area 2320 related to the actor selected, the area 2320 includes content items/movies related (first list of one or more related media items) to the actor selected, para 0126); and the second media center panel includes a second list of one or more related media (figs.29-30 shows a user interface panel 3000 [second media center panel] which includes detailed information area 3020 [second list of one or more related media] content items/movies related to the actor selected in the window 2900, para 0135, 0136).

Regarding claim 20, Yu further teaches comprising: receiving a selection of a media item from one or more media items displayed in the media center panel (fig.20 shows once the TV portal 2000 is selected by the user, content item such as "Lost" is displayed in the content item area 2020 which is selected by using a selection box 2022, upon the selection the user is presented with a panel 2100, which provides a user selectable buttons 2124, 2122 associated with the selected media content and the button 2122 enables the user to watch (receiving a selection of a media item), listen or consume the selected content item, para 0121, 0124); and presenting content associated with the selected media item (upon the selection the user is presented with a panel 2100, which provides a user selectable buttons 2124, 2122 associated with the selected media content and the button 2122 enables the user to watch (enable the user to watch the content is interpreted as receiving a selection of a media item to present content associated), listen or consume the selected content item, para 0121, 0134).

Claim 8 lacks an inventive step under PCT Article 33(3) as being obvious over Yu.

Regarding claim 8, Yu further teaches comprising: receiving a selection of a media item displayed in the list (fig.20 shows once the TV portal 2000 is selected by the user, content item such as "Lost" is displayed in the content item area 2020 which is selected by using a selection box 2022, upon the selection the user is presented with a panel 2100, which provides a user selectable buttons 2124, 2122 associated with the selected media content and the button 2122 enables the user to watch [receiving a selection of a media item], listen or consume the selected content item, para 0121, 0124), but lacks the teaching of determining if the selected media item is stored on a connected storage medium or available to purchase or rent from a content provider if the selected media item is stored on the connected storage medium, presenting content associated with the selected media item; if the selected media item is available to purchase or rent, connecting to the content provider to purchase or rent the selected media item; and presenting content associated with the selected media item.

However, Yu teaches determining if the media item is stored on a connected storage medium (figs.33-35 shows a search page 3400 which is accessed by the user and the user enters a search query which is "12 Monkeys" and a search is performed to match the entered search query with content information associated with the content items in the database 112, and in fig.35 the matching search result 3521 is presented and the user can select the item positioning the selection box 3522 on the desired content item and upon activation displays the content, para 0140) and if the media item is stored on the connected storage medium, presenting content associated with the selected media item (figs.33-35 shows a search page 3400 which is accessed by the user and the user enters a search query which is "12 Monkeys" and a search is performed to match the entered search query with content information associated with the content items in the database 112, and in fig.35 the matching search result 3521 is presented and the user can select the item positioning the selection box 3522 on the desired content item and upon activation displays the content, para 0140).

Further, Yu teaches that media content may be rented or purchased (para 108), and presenting presenting content associated with the selected media item (content for purchase or rent, para 128-130).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings to incorporate determining if the selected media item is stored on a connected storage medium or available to purchase or rent from a content provider if the selected media item is stored on the connected storage medium, presenting content associated with the selected media item into the invention of Yu. The motivation would have been to provide the users with an optimized user interface for better access to media contents.

Claims 1-20 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

Electronic Acknowledgement Receipt			
EFS ID:	24265804		
Application Number:	13968665		
International Application Number:			
Confirmation Number:	7370		
Title of Invention:	PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION		
First Named Inventor/Applicant Name:	Sanjiv Sirpal		
Customer Number:	111285		
Filer:	Douglas W. Swartz/Theresa Brown		
Filer Authorized By:	Douglas W. Swartz		
Attorney Docket Number:	6583-488		
Receipt Date:	04-DEC-2015		
Filing Date:	16-AUG-2013		
Time Stamp:	13:50:47		
Application Type:	Utility under 35 USC 111(a)		

# **Payment information:**

Submitted wi	Submitted with Payment no				
File Listing:					
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1		IDS_05.pdf	175522 e087/5d952a63318798758553b5a5ad6279 f9.68	yes	4

	Multipart Description/PDF files in .zip description				
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	Transmittal Letter		1	2	
	Information Disclosure Staten	nent (IDS) Form (SB08)	3	4	
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2	Non Patent Literature	6583-450-	2111478	no	10
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Warnings:					
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3	Non Patent Literature	6583-451- PCT_IPRP_02-26-2015.pdf	1008965	no	8
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Warnings:					
Information:					
4	Non Patent Literature	6583-452-	461083	no	8
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Information:					
5	Non Patent Literature	6583-481-	433142	no	8
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Warnings:					
Information:					
6	Non Patent Literature	6583-488-	353265	no	7
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Warnings:					
Information:					
7	Non Patent Literature	6583-489-	12968884	no	9
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Warnings:					
Information:					
8	Other Reference-Patent/App/Search	6583-450_OA_03-11-2015.pdf	1117465	no	13
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Information:					

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14	Other Reference-Patent/App/Search documents	6583-489_OA_05-08-2015.pdf	2153573	no	21
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13	documents	0505 401_1 OA_05-22-2015.pdf	9f483dab4b1a5070c85c54435d4fe7a5d16 a0c89	110	11
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12	documents	6583-452_OA_08-17-2015.pdf	f734aeefe1ea209bfc33ae1499bd3054d676 c4e1	no	13
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Warnings:			l		
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	Other Reference-Patent/App/Search		1144380		

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### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

## National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	) Group Art Unit: 2421
Sanjiv Sirpal	Confirmation No.: 7370
Serial No.: 13/968,665	) Examiner: James R. Marandi
Filed: August 16, 2013	) SUPPLEMENTAL  DISCONNATION DISCLOSURE
Atty. File No.: 6583-488	) <u>INFORMATION DISCLOSURE</u> ) <u>STATEMENT</u>
Entitled: "Panel User Interface for an Intelligent Television"	) Electronically Submitted
Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	
Dear Commissioner:	
The references cited on attached Form PTO/	SB08 are being called to the attention of the
Examiner.	
Copies of the cited non-patent and/or foreign	references are enclosed herewith.
Copies of the cited U.S. patents and/or patent	applications are enclosed herewith.
Copies of the cited U.S. patents/patent ap	oplication publications are not enclosed in
accordance with 37 C.F.R. § 1.98(a).	
Copies of the cited references are not enclosed	sed, in accordance with 37 C.F.R. § 1.98(d),
because the references were cited by or submitted	to the U.S. Patent and Trademark Office in
prior application Serial No filed	, which is relied upon for an
earlier filing date under 35 U.S.C. § 120.	
To the best of applicants' belief, the pertin	nence of the foreign-language references is
believed to be summarized in the attached Englis	sh abstracts and/or in the figures, although
applicants do not necessarily vouch for the accuracy	of the translation.
Examiner's attention is drawn to the following	g related applications:
Serial No filed	(Attorney Ref. No)
Serial No filed	(Attorney Ref. No)
Other:	
Submission of the above information is not in	
citable under the statutes or rules to support a rejection	on, that any item disclosed represents
analogous art, or that those skilled in the art would re	efer to or recognize the pertinence of any
reference without the benefit of hindsight nor should	l an inference he drawn as to the pertinence

of the references based on the order in which they are presented. Submission of this statement should not be taken as an indication that a search has been conducted, or that no better art exists.

It is respectfully requested that the cited information be expressly considered during the prosecution of this application and the references made of record therein.

Respectfully submitted,

SHERIDAN ROSS P.C.

DNS

By: /Douglas W. Swartz/

Douglas W. Swartz Registration No. 37739 1560 Broadway, Suite 1200 Denver, Colorado 80202-5141

(303) 863-9700

Date: Dec. 4, 2015

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of: Group Art Unit: 2421

SIRPAL et al. Confirmation No.: 7370

Serial No.: 13/968,665 Examiner: James R. Marandi

Filed: August 16, 2013

Entitled: "PANEL USER INTERFACE FOR AN | Submitted Via EFS-Web

INTELLIGENT TELEVISION"

Atty. File No.: 6583-488

Mail Stop Issue Fee Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## AMENDMENT AFTER ALLOWANCE PURSUANT TO 37 CFR § 1.312

Dear Sir/Madam:

Applicants submit this Amendment After Allowance pursuant to 37 CFR § 1.312 in response to the Notice of Allowance and Fee(s) Due having a mailing date of September 4, 2015. An amendment may be entered after the mailing of a Notice of Allowance but prior to payment of the issue fee upon the recommendation of the primary examiner. Therefore, it is respectfully requested that the above-referenced application be amended as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks/Arguments begin on page 7 of this paper.

# **AMENDMENTS TO THE SPECIFICATION**

Please amend paragraph [0083] of the specification as follows:

[0083] Figs. 17A-17B illustrates illustrate one or more panel types in accordance with embodiments of the present disclosure;

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims**

1. (Previously Presented) A method for displaying content on a television, comprising:

receiving a first input via an input device associated with the television; in response to the first input, displaying, via the television, an application panel interface; determining content currently being shown on the television;

identifying at least one of a content source and content information associated with the content currently being displayed via the television;

based on the content and the at least one of the content source and the content information, providing a first content panel in the application panel interface, wherein the first content panel is a first type of application panel;

receiving a first directional input via the input device associated with the television;

determining, based on a first direction associated with the first directional input, a second content panel to display via the television in the application panel interface, wherein the second content panel is a second type of application panel;

retrieving, from memory, a second content information based on the second type of content panel; and

displaying, via the television, the second content information in the second content panel.

2. (Previously Presented) The method of claim 1, further comprising: retrieving, from a memory, a first image that is representative of the at least one of content source and the content information; and

displaying, via the television, the first image in the first or second content panel.

3. (Previously Presented) The method of claim 1, wherein the application panel interface is provided in a portion of the display of the television.

- 4. (Previously Presented) The method of claim 1, further comprising: receiving a second directional input via the input device; and determining, based on a second direction associated with the second directional input, a third content panel to display via the television.
- 5. (Previously Presented) The method of claim 1, further comprising: retrieving at least a portion of the content information from the content source; and displaying, via the television, the content information associated with the determined source.
- 6. (Previously Presented) The method of claim 1, wherein the second content information comprises information associated with content information marked as favorite.
- 7. (Previously Presented) The method of claim 1, wherein the second content information comprises information associated with TV series episode content information.
- 8. (Previously Presented) The method of claim 1, wherein the second type of content panel is a search panel.
- 9. (Previously Presented) The method of claim 1, wherein the second type of content panel is a recommended panel.
  - 10. Cancelled
  - 11. Cancelled
  - 12. Cancelled
  - 13. Cancelled
  - 14. Cancelled
  - 15. Cancelled

16. (Currently Amended) A system for displaying content on a television, comprising:

an input device associated with the television;

a memory; and

a microprocessor operable tothat:

receive receives a first input via an input device associated with the television; in response to the first input, displaydisplays, via the television, an application panel interface;

determine determines content currently being shown on the television;

identify identifies at least one of a content source and content information associated with the content currently being displayed via the television;

based on the content and the at least one of the content source and the content information, <u>provide provides</u> a first content panel in the application panel interface, wherein the first content panel is a first type of application panel;

receive receives a first directional input via the input device associated with the television;

determined determines, based on a first direction associated with the first directional input, a content panel to display via the television in the application panel interface, wherein the second content panel is a second type of application panel;

retrieveretrieves, from memory, a second content information based on the second type of content panel; and

displaydisplays, via the television, the second content information in the second content panel.

17. (Previously Presented) The system of claim 16, wherein the microprocessor is further operable to:

retrieve, from a memory, a first image that is representative of the at least one of content source and the content information; and

display, via the television, the first image in the first or second content panel.

- 18. (Previously Presented) The system of claim 16, wherein the application panel interface is provided in a portion of the display of the television.
- 19. (Previously Presented) The system of claim 16, wherein the microprocessor is further operable to:

retrieve at least a portion of the content information from the source; and display, via the television, the content information associated with the determined source.

20. (Previously Presented) The system of claim 16, wherein the second content information comprises information associated with content information marked as favorite.

## **REMARKS/ARGUMENTS**

The amendment to the specification corrects a minor typographical error and does not add new matter. The amendments to Claim 16 do not require an additional search or examination, and the amendments are requested to further clarify any potential ambiguity in the claims.

Accordingly, Applicant believes that the requirements of 37CFR§1.312 and MPEP§714.16 have been satisfied and entry of this amendment is respectfully requested. Although no fees are believed to be due with the filing of this paper, please charge any deficiency or credit any overpayment to Deposit Account 19-1970.

Respectfully submitted,

SHERIDAN ROSS P.C.

By: /Douglas W. Swartz/
Douglas W. Swartz
Registration No. 37,739
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700

Date: December 4, 2015

Electronic Acknowledgement Receipt			
EFS ID:	24267226		
Application Number:	13968665		
International Application Number:			
Confirmation Number:	7370		
Title of Invention:	PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION		
First Named Inventor/Applicant Name:	Sanjiv Sirpal		
Customer Number:	111285		
Filer:	Douglas W. Swartz/Amy Duarte		
Filer Authorized By:	Douglas W. Swartz		
Attorney Docket Number:	6583-488		
Receipt Date:	04-DEC-2015		
Filing Date:	16-AUG-2013		
Time Stamp:	14:51:19		
Application Type:	Utility under 35 USC 111(a)		

# **Payment information:**

Submitted wit	h Payment	no			
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1		6583-488_Rule_312_Amendme	170390	yes	7
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	Multipart Description/PDF files in .zip description						
	Document Description	Start	End				
	Amendment after Notice of Allowance (Rule 312)	1	1				
	Specification	2	2				
	Claims	3	6				
	Applicant Arguments/Remarks Made in an Amendment	7	7				
Warnings:							
Information	:						
	Total Files Size (in bytes):	1	70390				

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#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

## New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

### PART B - FEE(S) TRANSMITTAL

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or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				e(s) Transmittal. The pers. Each addition	nis certifi al paper,	icate cannot be used t	or domestic mailings of the for any other accompanying nt or formal drawing, must
Sheridan Ross 1560 Broadway Suite 1200	s P.C.	4/2015	I h St ad tra	Centereby certify that the tale ates Postal Service and dressed to the Mainsmitted to the USF	rtificate nis Fee(s with suff il Stop PTO (57)	of Mailing or Trans s) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the da	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
Denver, CO 802	202						(Depositor's name)
							(Signature)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	PR	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
13/968,665	08/16/2013		Sanjiv Sirpal			6583-488	7370
TITLE OF INVENTION	N: PANEL USER INTER	RFACE FOR AN INTEL	LIGENT TELEVISION	_			
APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	E PREV. PAID ISSU	JE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0		\$960	12/04/2015
		_	_	_			
EXAM	MINER	ART UNIT	CLASS-SUBCLASS	╛			
MARAND	OI, JAMES R	2421	725-037000				
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer			2. For printing on the (1) The names of up or agents OR, alterna (2) The name of a sin registered attorney or 2 registered patent at listed, no name will be	to 3 registered pate tively, gle firm (having as agent) and the nan torneys or agents. If	nt attorn a member nes of up	er a 2 p to	n Ross P.C.
Number is required  3 ASSIGNEE NAME A		A TO BE PRINTED ON	N THE PATENT (print or t	-			
			•	• •	nee is id	lentified below, the de	ocument has been filed for
(A) NAME OF ASS	IGNEE		(B) RESIDENCE: (CIT	Y and STATE OR	COUNT	RY)	
Flextron	ics AP, LLC		San Jose, C	CA			
Please check the approp	oriate assignee category or	r categories (will not be	printed on the patent):	Individual 🛛 C	orporati	on or other private gro	oup entity Government
	) are submitted:  No small entity discount   # of Copies	permitted)	4b. Payment of Fee(s): (Plana A check is enclosed Payment by credit c  The director is hereboverpayment, to Dep	ard. Form PTO-203	8 is attac	ched.	shown above) ficiency, or credits any n extra copy of this form).
_ ` '	atus (from status indicate	*					
	ing micro entity status. Se		fee payment in the micr	o entity amount wil	l not be	accepted at the risk of	D/SB/15A and 15B), issue application abandonment.
Applicant asserting	ng small entity status. See	e 37 CFR 1.27	NOTE: If the application to be a notification of lo				ing this box will be taken
Applicant changi	ng to regular undiscounte	ed fee status.	NOTE: Checking this be entity status, as applical		oe a noti	fication of loss of enti	tlement to small or micro
NOTE: This form must	be signed in accordance	with 37 CFR 1.31 and 1.	.33. See 37 CFR 1.4 for sig	nature requirements	and cer	tifications.	
Authorized Signature	e /Douglas W	Swartz/		Date <b>I</b>	Decen	nber 4 2015	

Page 2 of 3

PTOL-85 Part B (10-13) Approved for use through 10/31/2013.

Typed or printed name Douglas W. Swartz

OMB 0651-0033

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

37,739

Registration No. \_

Electronic Patent Application Fee Transmittal							
Application Number:	13968665						
Filing Date:	16-Aug-2013						
Title of Invention:	PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION						
First Named Inventor/Applicant Name:	Sanjiv Sirpal						
Filer:	Douglas W. Swartz/Amy Duarte						
Attorney Docket Number:	65	83-488					
Filed as Large Entity							
Filing Fees for Utility under 35 USC 111(a)							
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)		
Basic Filing:							
Pages:							
Claims:							
Miscellaneous-Filing:							
Petition:							
Patent-Appeals-and-Interference:							
Post-Allowance-and-Post-Issuance:							
Utility Appl Issue Fee		1501	1	960	960		

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
	Tot	al in USD	(\$)	960

Electronic Acknowledgement Receipt				
EFS ID:	24267312			
Application Number:	13968665			
International Application Number:				
Confirmation Number:	7370			
Title of Invention:	PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION			
First Named Inventor/Applicant Name:	Sanjiv Sirpal			
Customer Number:	111285			
Filer:	Douglas W. Swartz/Amy Duarte			
Filer Authorized By:	Douglas W. Swartz			
Attorney Docket Number:	6583-488			
Receipt Date:	04-DEC-2015			
Filing Date:	16-AUG-2013			
Time Stamp:	14:54:14			
Application Type:	Utility under 35 USC 111(a)			

# **Payment information:**

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$960
RAM confirmation Number	1153
Deposit Account	191970
Authorized User	SWARTZ, DOUGLAS W.

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing	3				
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO 95P)	6583-488_Issue-fee-transmittal.	84955		1
i issue Fee	Issue Fee Payment (PTO-85B)	pdf	7a30343b1adc8e6b573ac2a1b9ac7adafef2 70aa	no	ı
Warnings:				<u>'</u>	
Information:					
2	Face Wardenhaut (CDOC)	6	30696		2
2	Fee Worksheet (SB06)	fee-info.pdf	383121ca0fd1ee5fd517b4091593ce6385f2 5e23	no	2
Warnings:		ı			
Information:					
		Total Files Size (in bytes)	11	5651	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

# NOTICE OF ALLOWANCE AND FEE(S) DUE

Sheridan Ross P.C. 1560 Broadway Suite 1200 Denver, CO 80202 09/04/2015

EXAMINER

MARANDI, JAMES R

ART UNIT

PAPER NUMBER

2421

DATE MAILED: 09/04/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/968,665	08/16/2013	Sanjiv Sirpal	6583-488	7370

TITLE OF INVENTION: PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	12/04/2015

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 (571).273.2885

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Certificate of Mailing or Transmission 111285 7590 09/04/2015 I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. Sheridan Ross P.C. 1560 Broadway **Suite 1200** (Depositor's name Denver, CO 80202 (Signature APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO 13/968,665 08/16/2013 6583-488 7370 Sanjiv Sirpal TITLE OF INVENTION: PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION APPLN. TYPE ENTITY STATUS ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE 12/04/2015 nonprovisional UNDISCOUNTED \$960 \$0 \$0 \$960 EXAMINER CLASS-SUBCLASS ART UNIT MARANDI, JAMES R 725-037000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) The names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. Tree Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent): 🗖 Individual 📮 Corporation or other private group entity 📮 Government 4a. The following fee(s) are submitted: 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) ☐ Issue Fee A check is enclosed. ☐ Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. Advance Order - # of Copies \_ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment. Applicant certifying micro entity status. See 37 CFR 1.29 ☐ Applicant asserting small entity status. See 37 CFR 1.27 <u>NOTE:</u> If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status. Applicant changing to regular undiscounted fee status. <u>NOTE:</u> Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable. NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications. Authorized Signature Date

Page 2 of 3

PTOL-85 Part B (10-13) Approved for use through 10/31/2013.

Typed or printed name

OMB 0651-0033

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Registration No.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/968,665	08/16/2013	Sanjiv Sirpal	6583-488	7370
111285 75	90 09/04/2015		EXAM	INER
Sheridan Ross P.O	C.		MARANDI	, JAMES R
1560 Broadway Suite 1200			ART UNIT	PAPER NUMBER
Denver, CO 80202			2421	
			DATE MAILED: 09/04/201	5

# **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

#### OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

### **Privacy Act Statement**

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No. 13/968,665	Applicant(s)	Applicant(s) SIRPAL ET AL.			
Notice of Allowability	Examiner James R. Marandi	<b>Art Unit</b> 2421	AIA (First Inventor to File) Status Yes			
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) of NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIC of the Office or upon petition by the applicant. See 37 CFR 1.313	OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	lication. If not i will be mailed i	included n due course. <b>THIS</b>			
<ul> <li>1.          ☐ This communication is responsive to 08/07/2015.         ☐ A declaration(s)/affidavit(s) under 37 CFR 1.130(b) was/were filed on</li> </ul>						
2. $\square$ An election was made by the applicant in response to a restr requirement and election have been incorporated into this ac		e interview on	; the restriction			
Prosecution Highway program at a participating intellectual	3. The allowed claim(s) is/are 1-9 and 16-20. As a result of the allowed claim(s), you may be eligible to benefit from the <b>Patent Prosecution Highway</b> program at a participating intellectual property office for the corresponding application. For more information, please see <a href="http://www.uspto.gov/patents/init_events/pph/index.jsp">http://www.uspto.gov/patents/init_events/pph/index.jsp</a> or send an inquiry to <a href="mailto:PPHfeedback@uspto.gov">PPHfeedback@uspto.gov</a> .					
4. Acknowledgment is made of a claim for foreign priority under	35 U.S.C. § 119(a)-(d) or (f).					
Certified copies:  a) ☐ All b) ☐ Some *c) ☐ None of the:  1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:	been received in Application No		pplication from the			
Applicant has THREE MONTHS FROM THE "MAILING DATE" on noted below. Failure to timely comply will result in ABANDONMETHIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with t	the requirements			
5. $\square$ CORRECTED DRAWINGS ( as "replacement sheets") must	be submitted.					
including changes required by the attached Examiner's Paper No./Mail Date						
Identifying indicia such as the application number (see 37 CFR 1.8 each sheet. Replacement sheet(s) should be labeled as such in the			not the back) of			
6. DEPOSIT OF and/or INFORMATION about the deposit of BI attached Examiner's comment regarding REQUIREMENT FO			ie			
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material  4. ☐ Interview Summary (PTO-413), Paper No./Mail Date	5. ☐ Examiner's Amendn 6. ☑ Examiner's Stateme 7. ☐ Other		for Allowance			
/James R Marandi/ Examiner, Art Unit 2421	/NATHAN FLYNN/ Supervisory Patent Exa	aminer, Art Ur	nit 2421			

U.S. Patent and Trademark Office PTOL-37 (Rev. 08-13)

Notice of Allowability

Part of Paper No./Mail Date 20150820

Application/Control Number: 13/968,665 Page 2

Art Unit: 2421

The present application, filed on or after March 16, 2013, is being examined

under the first inventor to file provisions of the AIA.

**Detailed Action** 

1. This Action is in response to After Final consideration request filed on 08/07/2015.

Applicant has canceled claims 10-15. Claims 1-9 and 16-20 were indicated as

allowable in the preceding office Action. After Final amendment is hereby entered.

Allowable Subject Matter

2. Claims 1-9, and 16-20 are allowed.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

Claims 1, and 16 (and their respective dependent claims) are allowed. Claims 1,

and 16 comprise a unique combination of elements that are not taught or suggested

by the art of record, available to the Examiner at this time, when considering the

claims as a whole.

Application/Control Number: 13/968,665 Page 3

Art Unit: 2421

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Contacts**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Marandi whose telephone number is (571)270-1843. The examiner can normally be reached on 8:00 AM- 5:00 PM M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2421

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James R Marandi/ Examiner, Art Unit 2421

	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	13968665	SIRPAL ET AL.
	Examiner	Art Unit
	JAMES R MARANDI	2421

✓	R	ejected		•	Can	celled	N	Non-E	Elected	A	Арј	oeal
= Allowed			÷	Res	tricted	I	Interf	erence	0	Obje	ected	
	☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47						R.1.47					
	CLA	IM						DATE				
F	inal	Original	10/01/2	014	05/02/2015	08/20/2015						
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	2	2	✓		=	=						
	3	3	✓		=	=						
	4	4	✓		=	=						
	5	5	✓		=	=						
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	7	7	✓		=	=						
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	9	9	✓		=	=						
		10	✓		✓	-						

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U.S. Patent and Trademark Office Part of Paper No.: 20150820

## Search Notes



Application/Control No.	Applicant(s)/Patent Under Reexamination
13968665	SIRPAL ET AL.
Examiner	Art Unit
JAMES R MARANDI	2421

CPC- SEARCHED							
Symbol	Date	Examiner					
H04N 1/00408; H04N 1/00419; H04N 1/00429; H04N 21/472; H04N	10/01/2014	JRM					
21/482; H04N 21/4825; G06F 3/048; G06F 17/30873							
H04N 1/00408; H04N 1/00419; H04N 1/00429; H04N 21/472; H04N	05/02/2015	JRM					
21/482; H04N 21/4825; G06F 3/048; G06F 17/30873							
East (Inventorship double patenting; Keywords; Class/Subclass:	08/20/2015	JRM					
725/37,38; 715/854,855; See search history)							

CPC COMBINATION SETS - SEARCHED				
Symbol	Date	Examiner		

	US CLASSIFICATION SEARCHE	ED	
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
East (Inventorship double patenting; Keywords; Class/Subclass: 725/37,38; 715/854,855; See search history)	10/01/2014	JRM
East (Inventorship double patenting; Keywords; Class/Subclass: 725/37,38; 715/854,855; See search history)	05/02/2015	JRM
Google Scholar keyword search	05/02/2015	JRM
East (Inventorship double patenting; Keywords; Class/Subclass: 725/37.38: 715/854.855: See search history)	08/20/2015	JRM

INTERFERENCE SEARCH						
US Class/	US Subclass / CPC Group	Date	Examiner			
CPC Symbol						
US PGPUB	Keyword search, claims only, See search history	08/20/2015	JRM			

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# Issue Classification

App	lication	/Contro	l No
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13968665

SIRPAL ET AL.

Applicant(s)/Patent Under Reexamination

Examiner

JAMES R MARANDI

Art Unit

2421

CPC						
Symbol					Туре	Version
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	/JAMES R MARANDI/ Examiner.Art Unit 2421		08/20/2015	Total Claims Allowed:		
(Assistant				(Date)	1	4
	/NATHAN FLYNN/ Supervisory Patent Examiner.Art Unit 2421		2421 08/24/2015	O.G. Print Claim(s)	O.G. Print Figure	
(Primary E	xamin	ier)		(Date)	1	16B

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Application/Control	No

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SIRPAL ET AL.

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Examiner

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H04N	21	1	4532	1	2013-01-01
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H04N	5	1	45	T	2013-01-01

CPC Combination Sets										
Symbol	Туре	Set	Ranking	Version						

/JAMES R MARANDI/ Examiner.Art Unit 2421	08/20/2015	Total Claims Allowed:		
(Assistant Examiner)	(Date)			
/NATHAN FLYNN/ Supervisory Patent Examiner.Art Unit 2421	08/24/2015	O.G. Print Claim(s)	O.G. Print Figure	
(Primary Examiner)	(Date)	1	16B	

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US ORIGINAL CLASSIFICATION					INTERNATIONAL CLASSIFICATION					ON					
	CLASS SUBCLASS					CLAIMED				LAIMED	NON-CLAIMED				CLAIMED
725			37												
	C	ROSS REFI	ERENCE(	S)							+				
CLASS	St	JBCLASS (ON	SUBCLAS	S PER BLO	CK)										
725	38														
715	854	855								·					
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/JAMES R MARANDI/ Examiner.Art Unit 2421	08/20/2015	Total Claims Allowed:				
(Assistant Examiner)	(Date)	14				
/NATHAN FLYNN/ Supervisory Patent Examiner.Art Unit 2421	08/24/2015	O.G. Print Claim(s)	O.G. Print Figure			
(Primary Examiner)	(Date)	1	16B			

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	Examiner	Art Unit

	☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47														
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
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2	2	12	18												
3	3	13	19												
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/JAMES R MARANDI/ Examiner.Art Unit 2421	08/20/2015	Total Claims Allowed:		
(Assistant Examiner)	(Date)	14		
/NATHAN FLYNN/ Supervisory Patent Examiner.Art Unit 2421	08/24/2015	O.G. Print Claim(s)	O.G. Print Figure	
(Primary Examiner)	(Date)	1	16B	

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## **EAST Search History**

## **EAST Search History (Prior Art)**

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L19	82	((Mohammed) near2 (Selim)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2015/08/20 17:28
L20	23	((Saulo) near2 (Dourado)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2015/08/20 17:28
L21	107	((Alexander) near2 ("de Paz")).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2015/08/20 17:28
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S68	0	S58 and (smart adj TV)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2015/05/02 16:55
S69	0	S59 and (smart adj TV)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2015/05/02 16:55
S70	0	S60 and (smart adj TV)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2015/05/02 16:55
S71	143	S61 and (smart adj TV)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2015/05/02 16:55
S72	299	S62 and (smart adj TV)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2015/05/02 16:55
S73	21	S63 and (smart adj TV)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2015/05/02 16:55
S74	6	S64 and (smart adj TV)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2015/05/02 16:56
S75	4	S66 and "715"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2015/05/02 16:57
S76	5	S71 and "715"/\$.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	OR	ON	2015/05/02 17:00

## **EAST Search History (Interference)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	18	Determin\$3 direction input application panel	US-PGPUB; USPAT; UPAD	WITH	ON	2015/08/20 17:25
L3	1	(determin\$3 direction input application panel).clm.	US-PGPUB; USPAT; UPAD	WITH	ON	2015/08/20 17:26
S77	0	(((identify\$3 or identification) near2 (content near2 source)) same input\$4 same direction\$3).clm.	US-PGPUB; USPAT; UPAD	OR	ON	2015/05/02 16:54

8/20/2015 5:28:57 PM

C:\ Users\ jmarandi\ Documents\ EAST\ Workspaces\ 13968665.wsp

Please Enter Amednment JRM 08/27/2015

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of: SANJIV SIRPAL	Group Art Unit: 2421
Application No.: 13/968,665	Examiner: MARANDI, JAMES R
Filed: August 16, 2013	Confirmation No.: 7370
Atty. File No.: 6583-488	) )

For: "PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION"

### **AMENDMENT AND RESPONSE**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### Commissioner:

Applicants submit this Amendment and Response to address the non-final Office Action having a mailing date of May 7, 2015. Please credit any overpayment or charge any underpayment to Deposit Account No. 19-1970.

Please amend the above-identified patent application as follows:

**Amendments to the Claims** are shown in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 6 of this paper.

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of: SANJIV SIRPAL	Group Art Unit: 2421
Application No.: 13/968,665	Examiner: MARANDI, JAMES R
Filed: August 16, 2013	Confirmation No.: 7370
Atty. File No.: 6583-488	) )

For: "PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION"

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### Commissioner:

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Please amend the above-identified patent application as follows:

**Amendments to the Claims** are shown in the listing of claims which begins on page 2 of this paper.

**Remarks** begin on page 6 of this paper.

#### Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Previously Presented) A method for displaying content on a television, comprising:

receiving a first input via an input device associated with the television; in response to the first input, displaying, via the television, an application panel interface; determining content currently being shown on the television;

identifying at least one of a content source and content information associated with the content currently being displayed via the television;

based on the content and the at least one of the content source and the content information, providing a first content panel in the application panel interface, wherein the first content panel is a first type of application panel;

receiving a first directional input via the input device associated with the television;

determining, based on a first direction associated with the first directional input, a second content panel to display via the television in the application panel interface, wherein the second content panel is a second type of application panel;

retrieving, from memory, a second content information based on the second type of content panel; and

displaying, via the television, the second content information in the second content panel.

2. (Previously Presented) The method of claim 1, further comprising: retrieving, from a memory, a first image that is representative of the at least one of content source and the content information; and

displaying, via the television, the first image in the first or second content panel.

- 3. (Previously Presented) The method of claim 1, wherein the application panel interface is provided in a portion of the display of the television.
  - 4. (Previously Presented) The method of claim 1, further comprising:

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Attorney Docket No.: 6583-488

receiving a second directional input via the input device; and determining, based on a second direction associated with the second directional input, a third content panel to display via the television.

- 5. (Previously Presented) The method of claim 1, further comprising: retrieving at least a portion of the content information from the content source; and displaying, via the television, the content information associated with the determined source.
- 6. (Previously Presented) The method of claim 1, wherein the second content information comprises information associated with content information marked as favorite.
- 7. (Previously Presented) The method of claim 1, wherein the second content information comprises information associated with TV series episode content information.
- 8. (Previously Presented) The method of claim 1, wherein the second type of content panel is a search panel.
- 9. (Previously Presented) The method of claim 1, wherein the second type of content panel is a recommended panel.

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- 10. Cancelled
- 11. Cancelled
- 12. Cancelled
- 13. Cancelled
- 14. Cancelled
- 15. Cancelled

16. (Previously Presented) A system for displaying content on a television, comprising:

an input device associated with the television;

a memory; and

interface;

a microprocessor operable to:

receive a first input via an input device associated with the television; in response to the first input, display, via the television, an application panel

determine content currently being shown on the television;

identify at least one of a content source and content information associated with the content currently being displayed via the television;

based on the content and the at least one of the content source and the content information, provide a first content panel in the application panel interface, wherein the first content panel is a first type of application panel;

receive a first directional input via the input device associated with the television; determine, based on a first direction associated with the first directional input, a content panel to display via the television in the application panel interface, wherein the second content panel is a second type of application panel;

retrieve, from memory, a second content information based on the second type of content panel; and

display, via the television, the second content information in the second content panel.

17. (Previously Presented) The system of claim 16, wherein the microprocessor is further operable to:

retrieve, from a memory, a first image that is representative of the at least one of content source and the content information; and

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display, via the television, the first image in the first or second content panel.

- 18. (Previously Presented) The system of claim 16, wherein the application panel interface is provided in a portion of the display of the television.
- 19. (Previously Presented) The system of claim 16, wherein the microprocessor is further operable to:

retrieve at least a portion of the content information from the source; and display, via the television, the content information associated with the determined source.

20. (Previously Presented) The system of claim 16, wherein the second content information comprises information associated with content information marked as favorite.

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#### **REMARKS/ARGUMENTS**

#### Status of the Claims

In the Office Action mailed May 7, 2015, claims 1-20 were pending in the application. Claims 1-9 and 16-20 were allowed. In the present response, claims 10-15 have been cancelled. Therefore, all claims should now be allowable. Applicants respectfully request reconsideration of this application as amended.

#### **CONCLUSION**

In the Office Action, Claims 1-9 and 16-20 were allowed. All other claims (Claims 10-15) have now been cancelled. Thus, Applicants believe all claims now pending in this Application are in a condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested. Applicants do not acquiesce to any objection, rejection, or argument not specifically addressed herein. Rather, the Applicants believe the amendments and arguments contained herein overcome all objections, rejections, or arguments.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (303) 863-2987.

The Commissioner is hereby authorized to charge to deposit account number 19-1970 any fees under 37 CFR § 1.16 and 1.17 that may be required by this paper and to credit any overpayment to that Account. If any extension of time is required in connection with the filing of this paper and has not been separately requested, such extension is hereby petitioned.

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Respectfully submitted,

SHERIDAN ROSS P.C.

Date: August 7, 2015 By: /Tadd F. Wilson/

Tadd F. Wilson Reg. No. 54,544

1560 Broadway, Suite 1200 Denver, Colorado 80202 Telephone: 303-863-9700

Attorney Docket No.: 6583-488

Electronic Acknowledgement Receipt			
EFS ID:	23152051		
Application Number:	13968665		
International Application Number:			
Confirmation Number:	7370		
Title of Invention:	PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION		
First Named Inventor/Applicant Name:	Sanjiv Sirpal		
Customer Number:	111285		
Filer:	Tadd Fjelp Wilson/Kathy Johnston		
Filer Authorized By:	Tadd Fjelp Wilson		
Attorney Docket Number:	6583-488		
Receipt Date:	07-AUG-2015		
Filing Date:	16-AUG-2013		
Time Stamp:	16:40:11		
Application Type:	Utility under 35 USC 111(a)		

# **Payment information:**

Submitted with Payment	no
File Listing:	

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		AMEND 02 6583-488.pdf	106025	200	6
'		AMEND_02_0303-400.pui	06f548e1437fe579d3c5950260c43e708fd0 8836	yes	0

	Multipart Description/PDF files in .zip description			
	Document Description	Start	End	
	Response After Final Action	1	1	
	Claims	2	5	
	Applicant Arguments/Remarks Made in an Amendment	6	6	
Warnings:				
Information				
	Total Files Size (in bytes):	1	06025	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

P	ATENT APPL		E DET	ERMINATION		Applicatio	n or Docket Number 8/968,665	Filing Date 08/16/2013	To be Mailed
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			(Column		(Column 2)	LD - FAI	11 1		
	FOR		NUMBER FI	_ED	NUMBER EXTRA		RATE (\$)	F	FEE (\$)
	BASIC FEE (37 CFR 1.16(a), (b),	or (c))	N/A		N/A		N/A		
	SEARCH FEE (37 CFR 1.16(k), (i), o	or (m))	N/A		N/A		N/A		
	EXAMINATION FE (37 CFR 1.16(o), (p),	E	N/A		N/A		N/A		
	TAL CLAIMS CFR 1.16(i))	(4))	mir	nus 20 = *			X \$ =		
IND	EPENDENT CLAIM CFR 1.16(h))	S	m	inus 3 = *			X \$ =		
	APPLICATION SIZE (37 CFR 1.16(s))	of p for : frac	aper, the a	ation and drawing application size f y) for each additi of. See 35 U.S.C	ee due is \$310 ( onal 50 sheets o	\$155 or			
	MULTIPLE DEPEN	IDENT CLAIM P	RESENT (3	7 CFR 1.16(j))					
* If	the difference in colu	ımn 1 is less tha	n zero, ente	r "0" in column 2.			TOTAL		
		(Column 1)		APPLICAT	ION AS AMEN		ART II		
LN	08/07/2015	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EX	TRA	RATE (\$)	ADDITIO	ONAL FEE (\$)
AMENDMENT	Total (37 CFR 1.16(i))	* 14	Minus	** 20	= 0		x \$80 =		0
EN	Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0		× \$420 =		0
AM	Application Si	ze Fee (37 CFR	1.16(s))						
	FIRST PRESEN	ITATION OF MULT	IPLE DEPEN	DENT CLAIM (37 CFF	R 1.16(j))				
							TOTAL ADD'L FEI		0
		(Column 1)		(Column 2)	(Column 3)	)			
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EX	TRA	RATE (\$)	ADDITI	ONAL FEE (\$)
ENDMENT	Total (37 CFR 1.16(i))	w	Minus	w/w	=		X \$ =		
DM	Independent (37 CFR 1.16(h))	*	Minus	***	=		X \$ =		
1EN	Application Si	ze Fee (37 CFR	1.16(s))						
AM	FIRST PRESEN	TATION OF MULT	IPLE DEPEN	DENT CLAIM (37 CFF	R 1.16(j))				
							TOTAL ADD'L FEI		
** If ***	the entry in column of the "Highest Numbe If the "Highest Numb "Highest Number P	er Previously Pai er Previously Pa	d For" IN Th id For" IN T	HIS SPACE is less HIS SPACE is less	than 20, enter "20" s than 3, enter "3".		LIE /JAMES MASG		

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS

ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.** 

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/968,665	08/16/2013	Sanjiv Sirpal	6583-488	7370
111285 Sheridan Ros	7590 05/07/20. s P.C.	1.5	EXAM	IINER
1560 Broadw Suite 1200			MARAND	I, JAMES R
Denver, CO 8	30202		ART UNIT	PAPER NUMBER
			2421	
			NOTIFICATION DATE	DELIVERY MODE
			05/07/2015	EI ECTRONIC

### Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com edocket@sheridanross.com

	Application No.	Applicant(s)	
	13/968,665	SIRPAL ET A	
Office Action Summary	Examiner James R. Marandi	Art Unit 2421	AIA (First Inventor to File) Status Yes
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	corresponden	ce address
A SHORTENED STATUTORY PERIOD FOR REPLY THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed the mailing date of D (35 U.S.C. § 133	f this communication.
Status			
1) Responsive to communication(s) filed on <u>01/08</u> A declaration(s)/affidavit(s) under <b>37 CFR 1.1</b> 2a) This action is <b>FINAL</b> . 2b) This  3) An election was made by the applicant in responsible to the restriction requirement and election to the sum of	action is non-final.  onse to a restriction requirement have been incorporated into this	action.	
closed in accordance with the practice under <i>E</i>	·		.o the ments is
Disposition of Claims*	parto Quayro, 1000 O.D. 11, 40	O.G. 210.	
5) Claim(s) 1-20 is/are pending in the application. 5a) Of the above claim(s) is/are withdraw 6) Claim(s) 1-9 and 16-20 is/are allowed. 7) Claim(s) 10-15 is/are rejected. 8) Claim(s) is/are objected to. 9) Claim(s) are subject to restriction and/o * If any claims have been determined allowable, you may be el participating intellectual property office for the corresponding aphttp://www.uspto.gov/patents/init_events/pph/index.jsp or send  Application Papers 10) The specification is objected to by the Examine	wn from consideration.  r election requirement. igible to benefit from the Patent Pro- pplication. For more information, plea an inquiry to PPHfeedback@uspto.c	ase see 10V.	n <b>way</b> program at a
11) The drawing(s) filed on is/are: a) acce			
Applicant may not request that any objection to the	- ,		` '
Replacement drawing sheet(s) including the correct  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign  Certified copies:  a) All b) Some** c) None of the:  1. Certified copies of the priority document  2. Certified copies of the priority document  3. Copies of the certified copies of the priority document  application from the International Bureau  ** See the attached detailed Office action for a list of the certified	priority under 35 U.S.C. § 119(a) ts have been received. ts have been received in Applicatority documents have been received (PCT Rule 17.2(a)).	i-(d) or (f).	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/S	3) Interview Summary Paper No(s)/Mail Da		
Paper No(s)/Mail Date	4)  Other:		

U.S. Patent and Trademark Office PTOL-326 (Rev. 11-13)

Art Unit: 2421

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

#### **DETAILED ACTION**

## Response to Amendment

- This action is in response to applicant's amendment filed on 01/09/2015. Claims 1-20 are presently pending.
  - 1.1. Independent claims 1 and 16 (and their dependent claims), as amended, present a unique combination of elements that are not taught or suggested by the art of record, available to the Examiner at this time, when considering the claims as a whole. Therefore, claims 1-9 and 16-20 are allowed.
  - 1.2. Claims 10-15, directed to a computer code that does not resemble the method and system claims of 1-9 and 16-20, therefore they are rejected as presented below.

### Response to Arguments

 Applicant has not presented any arguments with respect to claims 10-15, and simply alleges that said claims (in viewe of the amendment) overcome the prior art of record.

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Examiner respectfuly disagrees and rejects said claims (as amended) as analyzed below.

#### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

- 2. Claims 10-13, and 15 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Rhoads et al., USPGPUB 2012/0174039 (hereinafter "Rhoads").
  - 2.1. Regarding claim 10, Rhoads discloses a non-transitory computer readable information storage medium (Fig. 3, 308) having stored thereon instructions that cause a computing system to execute a method (¶¶ [48]-[49]) for displaying content on a television (Abstract, Figs. 1, 3, 11, and navigational sequence as detailed in Figs. 5-8), comprising:

While a first content panel is being displayed (502) in an application panel interface, receiving a first directional input (Fig. 5, 508, navigating/

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selecting from list 502; ¶¶ [87]-[90]) via an input device (Fig. 3, 310, ¶ [53])
associated with the television (User device 300, as further detailed in Fig. 4, ¶
[66]), wherein the first content panel is a first type of application panel
(Panel identifying various user options);

determining, based on a first direction associated with the first directional input (selection/ highlighted region 506), a second content panel to display via the television in the application panel interface (504, ¶ [89]), wherein the second content panel is a second type of application panel (category of content available to the user based on selections from panel 1);

retrieving, from memory (as shown in Fig. 3, control circuitry 304 comprising processing circuitry 306 retrieves information from memory 308, ¶¶ [[49], [51]), a content information based on the second type of panel (e.g. "AOL Autos"); and

displaying, via the television, the content information in the second content panel based on the selected panel (Video displayed in Fig. 5,  $\P$  [92]-[96]).

#### 2.1.1. Regarding claim 11, Rhoads discloses:

retrieving, from a memory (as analyzed for claim 1), a first image (as displayed in 512) that is representative of the at least one of the content information (shown in region 526, and indicated via arrows 522, 524); and

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displaying, via the television, the first image in the second content panel ( $\P$  [92], [97]).

- 2.1.2. Regarding claim 12, Rhoads discloses wherein the application panel interface is provided in a portion of the display of the television (as shown in 500).
- 2.1.3. Regarding claim 13, Rhoads discloses wherein the content information comprises information associated with **content information marked as**favorite (As shown in Fig. 5, user may select "My Favorites" to be able to select from list of favorite content; See ¶¶ [43], [70])).
- 2.1.4. Regarding claim 15, Rhoads discloses wherein the content information comprises information associated with **TV series episode** content information (As shown in Fig. 5, content is associated with AOL series episodes of TRANSLOGIC 6.x), and wherein the second type of content panel is an info panel associated with the TV series episode content information (516, TRANSLOGIC 6.2: Honda Civic).

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#### Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rhodes, in view of H. Bin Sohail, "Smart TV- A Late Bloomer", Haedwarezone.com, April 1, 2011 (hereinafter "Sohail").
  - 4.1. Regarding claim 14, Rhoads discloses:

receiving a second directional input via the input device ((As further highlighted and detailed in Fig. 6, user may also choose a second directional input 508 of panel 504, such as highlighted by 506, ¶ [110]);

determining, based on a second direction associated with the second directional input, a source of at least one content information to be displayed in a third content panel (as shown in area 606);

retrieving at least a portion of the at least one second content information from the determined source (e.g. as shown in 606); and

displaying, via the television, the second content information associated with the determined source (606,  $\P$  [110]).

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Rhodes is silent on the content information to be displayed in a third panel is

based on a search panel.

However, Sohail discloses a Samsung Smart TV interface (Figure on page 2/2)

whereby the viewer has a search option which will activate a search panel upon

which the result of the search will be displayed in a new window where upon

selection content information to be displayed in a third panel is based on a

search panel (Page 1/2, 4th paragraph). Also see

https://www.youtube.com/watch?v=Y1a9WN8cOG0 uploaded on June 14, 2011,

for a demonstration).

Therefore, it would have been obvious to one of ordinary skill in the art, before

the effective filing date of the claimed invention, to modify the system of Rhodes

with Sohail's teachings in order to provide the viewer with the ability of searching

other sources, such as world wide web, for additional content information.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

#### **Contacts**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Marandi whose telephone number is (571)270-1843. The examiner can normally be reached on 8:00 AM- 5:00 PM M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 13/968,665

Art Unit: 2421

Information regarding the status of an application may be obtained from the

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/James R Marandi/

Examiner, Art Unit 2421

/NATHAN FLYNN/

Supervisory Patent Examiner, Art Unit 2421

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Part of Paper No. 20150502

Complete if Known Substitute for form 1449/PTO 13/968,665 Application Number INFORMATION DISCLOSURE Filing Date August 16, 2013 STATEMENT BY APPLICANT First Named Inventor Sanjiv Sirpal (Use as many sheets as necessary) Art Unit 2421 Examiner Name James R. Marandi 4 Attorney Docket Number 6583-488 1 of Sheet

Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-kind Code <sup>2 (if known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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/James Marandi/

Examiner

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Date Considered

05/02/2015

Sı	Substitute for form 1449/PTO			Complete if Known		
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	(Use as m	any sheets as ne	cessary)	Art Unit	2421	
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			4	Attorney Docket Number	6583-488	

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Examiner Signature	/James Marandi/	Date Considered	05/02/2015

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IN	FORMA <sup>*</sup>	TION DISC	CLOSURE	Filing Date	August 16, 2013	
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	(Use as m	any sheets as ne	cessary)	Art Unit	2421	
				Examiner Name	James R. Marandi	
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				Application Number	13/968,665
IN	INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Filing Date	August 16, 2013
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				Examiner Name	James R. Marandi
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## **EAST Search History**

## **EAST Search History (Prior Art)**

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S36	94	(data adj (transmission or communication)) with ((packet or frame) adj ID)	US-PGPUB; USPAT	OR	ON	2014/12/23 23:20
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S40	0	S38 same (request\$3 near2 (retransmit\$3 or retransmission))	US-PGPUB; USPAT	OR	ON	2014/12/23 23:25
S41	0	S38 same (request\$3 near2 resend\$3)	US-PGPUB; USPAT	OR	ON	2014/12/23 23:26
S42	2	S38 same (lost near2 (packets or frames))	US-PGPUB; USPAT	OR	ON	2014/12/23 23:26
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S44	0	(application panel) same (Smart TV)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	ADJ	ON	2015/05/02 08:50
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S46	86	(application panel) and IPTV	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; IBM_TDB	ADJ	ON	2015/05/02 08:56
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## **EAST Search History (Interference)**

Ref #	Hits	Search Query	81	Default Operator	Plurals	Time Stamp
L24	0	(((identify\$3 or identification) near2 (content near2 source)) same input\$4	US-PGPUB; USPAT;	OR	ON	2015/05/02 16:54

same direction\$3).clm. UPAD

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	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	13968665	SIRPAL ET AL.
	Examiner	Art Unit
	JAMES R MARANDI	2421

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☐ Claims	☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47							R.1.47		
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Final	Original	10/01/2014	05/02/2015							
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## Search Notes



Application/Control No.	Applicant(s)/Patent Under Reexamination
13968665	SIRPAL ET AL.
Examiner	Art Unit

2421

CPC- SEARCHED					
Symbol	Date	Examiner			
H04N 1/00408; H04N 1/00419; H04N 1/00429; H04N 21/472; H04N	10/01/2014	JRM			
21/482; H04N 21/4825; G06F 3/048; G06F 17/30873					
H04N 1/00408; H04N 1/00419; H04N 1/00429; H04N 21/472; H04N	05/02/2015	JRM			
21/482; H04N 21/4825; G06F 3/048; G06F 17/30873					
		JRM			

JAMES R MARANDI

CPC COMBINATION SETS - SEARCHED				
Symbol	Date	Examiner		

US CLASSIFICATION SEARCHED					
Class	Subclass	Date	Examiner		

SEARCH NOTES						
Search Notes	Date	Examiner				
East (Inventorship double patenting; Keywords; Class/Subclass: 725/37,38; 715/854,855; See search history)	10/01/2014	JRM				
East (Inventorship double patenting; Keywords; Class/Subclass: 725/37,38; 715/854,855; See search history)	05/02/2015	JRM				
Google Scholar keyword search	05/02/2015	JRM				

INTERFERENCE SEARCH					
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner		

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Complete if Known Substitute for form 1449/PTO 13/968,665 Application Number INFORMATION DISCLOSURE Filing Date August 16, 2013 STATEMENT BY APPLICANT First Named Inventor Sanjiv Sirpal (Use as many sheets as necessary) Art Unit 2421 Examiner Name James R. Marandi 6 Attorney Docket Number 6583-488 1 of Sheet

Examiner	Cite	Document Number	U.S. PATENT DO	Name of Patentee or	Pages, Columns, Lines, Where
nitials*	No. <sup>1</sup>	Number-kind Code 2 (if known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
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Examiner Signature /James Marandi/ Date Considered 05/02/2015

Complete if Known Substitute for form 1449/PTO Application Number 13/968,665 INFORMATION DISCLOSURE Filing Date August 16, 2013 STATEMENT BY APPLICANT First Named Inventor Sanjiv Sirpal (Use as many sheets as necessary) Art Unit 2421 Examiner Name James R. Marandi 2 6 Attorney Docket Number 6583-488 of Sheet

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Examiner Signature	/James Marandi/	Date Considered	05/02/2015

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

s	Substitute for form 1449/PTO			Complete if Known		
				Application Number	13/968,665	
IN	FORMA <sup>®</sup>	TION DISC	CLOSURE	Filing Date	August 16, 2013	
S.	ГАТЕМЕ	NT BY AP	PLICANT	First Named Inventor	Sanjiv Sirpal	
	(Use as m	any sheets as ne	cessary)	Art Unit	2421	
				Examiner Name	James R. Marandi	
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	UNPUBLISHED U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-kind Code <sup>2 (if known)</sup>	Filing Date MM-DD-YYYY	Name of Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
/J.M./	67	14/407593	12/12/2014	Sirpal et al.			
9800	68	14/407598	12/12/2014	Sirpal et al.			
***************************************	69	14/407601	12/12/2014	Sirpal et al.			
00000	70	14/407609	12/12/2014	Sirpal et al.			
	71	14/418969	02/02/2015	Sirpal et al.			
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/J.M./	73	14/418971	02/02/2015	Shoykher et al.			

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Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document  Country Code <sup>3</sup> ; Number <sup>4</sup> ; Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>

			NON-PATENT LITERATURE DOCUME	ENTS	
Exami Initials		Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article magazine, journal, serial, symposium, catalog, etc.), date, page(s), vo where published.		
/J.N	<b>VI.</b> /	74	International Preliminary Report on Patentability for Inte PCT/CN2013/081639, mailed Feb. 26, 2015 (Attorney's	•	, .,
		75	Official Action for U.S. Patent Application No. 13/969,84 No. 6583-426) 21 pages	6, mailed M	lar. 02, 2015 (Attorney's Ref.
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00000000000		77	Official Action for U.S. Patent Application No. 13/970,38 No. 6583-436) 12 pages	88, mailed J	an. 22, 2015 (Attorney's Ref.
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000000000000		79	Official Action for U.S. Patent Application No. 13/970,40 No. 6583-438) 25 pages	9, mailed F	eb. 11, 2015 (Attorney's Ref.
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/J.I	M./	81	Official Action for U.S. Patent Application No. 13/970,44 No. 6583-441) 10 pages	2, mailed F	eb. 26, 2015 (Attorney's Ref.
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S	ubstitute for forr	m 1449/PTO		Complete if Known		
				Application Number	13/968,665	
IN	FORMA <sup>*</sup>	TION DISC	CLOSURE	Filing Date	August 16, 2013	
STATEMENT BY APPLICANT			PLICANT	First Named Inventor	Sanjiv Sirpal	
	(Use as many sheets as necessary)			Art Unit	2421	
				Examiner Name	James R. Marandi	
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/J	.M./	82	Official Action for U.S. Patent Application No. 13/970,450, mailed Nov. 19, 2014 (Attorney's Ref. No. 6583-442) 12 pages
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Examiner Signature	/James Marandi/	Date Considered	05/02/2015	

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STATEMENT BY APPLICANT			PLICANT	First Named Inventor	Sanjiv Sirpal	
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				Examiner Name	James R. Marandi	
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/J.M./	101	Official Action for U.S. Patent Application No. 13/969,506, mailed Jan. 23, 2015 (Attorney's Ref. No. 6583-480) 9 pages
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				Application Number	13/968,665
IN	FORMA <sup>-</sup>	TION DISC	CLOSURE	Filing Date	August 16, 2013
S <sup>-</sup>	STATEMENT BY APPLICANT (Use as many sheets as necessary)			First Named Inventor	Sanjiv Sirpal
				Art Unit	2421
				Examiner Name	James R. Marandi
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/ 1 5 4 /	120	Official Action for U.S. Patent Application No. 13/969,504, mailed Feb. 23, 2015 (Attorney's Ref.
/J.M./		No. 6583-526) 10 pages

Examiner	/James Marandi/	Date	05/02/2015
Signature		Considered	l l

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Sheet

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(Use as many sheets as necessary)

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Cor	nplete if Known
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Filing Date	August 16, 2013
First Named Inventor	Sanjiv Sirpal
Art Unit	2421
Examiner Name	James R. Marandi
Attorney Docket Number	6583-488

			U.S. PATENT DO		
Examiner nitials*	Cite No. <sup>1</sup>	Document Number Number-kind Code <sup>2 (if known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	5734444	03/31/1998	Yoshinobo	
	2	6285804	09/04/2001	Crinon et al.	
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Examiner	Date	
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Sheet

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of

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Cor	mplete if Known
Application Number	13/968,665
Filing Date	August 16, 2013
First Named Inventor	Sanjiv Sirpal
Art Unit	2421
Examiner Name	James R. Marandi
Attorney Docket Number	6583-488

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Signature Considered | Consider

Complete if Known Substitute for form 1449/PTO Application Number 13/968,665 INFORMATION DISCLOSURE Filing Date August 16, 2013 STATEMENT BY APPLICANT First Named Inventor Sanjiv Sirpal (Use as many sheets as necessary) Art Unit 2421 Examiner Name James R. Marandi 3 6 Attorney Docket Number 6583-488 of Sheet

	UNPUBLISHED U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-kind Code <sup>2 (if known)</sup>	Filing Date MM-DD-YYYY	Name of Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear			
	67	14/407593	12/12/2014	Sirpal et al.				
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	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	No. <sup>1</sup>	Foreign Patent Document  Country Code <sup>3</sup> ; Number <sup>4</sup> ; Kind Code <sup>5</sup> ( <i>if known</i> )	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>		

		NON-PATENT LITERATURE DOCUMENTS
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
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Examiner	Date	
Signature	Considered	

Complete if Known Substitute for form 1449/PTO Application Number 13/968,665 INFORMATION DISCLOSURE Filing Date August 16, 2013 STATEMENT BY APPLICANT First Named Inventor Sanjiv Sirpal (Use as many sheets as necessary) Art Unit 2421 Examiner Name James R. Marandi 4 6 Attorney Docket Number 6583-488

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Complete if Known Substitute for form 1449/PTO Application Number 13/968,665 INFORMATION DISCLOSURE Filing Date August 16, 2013 STATEMENT BY APPLICANT First Named Inventor Sanjiv Sirpal (Use as many sheets as necessary) Art Unit 2421 Examiner Name James R. Marandi 5 6 Attorney Docket Number 6583-488

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П	Examiner	Date	
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				Application Number	13/968,665	
l IN	FORMA <sup>-</sup>	TION DISC	CLOSURE	Filing Date	August 16, 2013	
s <sup>-</sup>	STATEMENT BY APPLICANT			First Named Inventor	Sanjiv Sirpal	
	(Use as many sheets as necessary)			Art Unit	2421	
				Examiner Name	James R. Marandi	
Sheet	6	of	6	Attorney Docket Number	6583-488	

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	No. 6583-526) 10 pages

Examiner	Date	
Signature	Considered	

### PATENT COOPERATION TREATY

## **ADVANCE E-MAIL**

#### From the INTERNATIONAL BUREAU

## **PCT**

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)

(PCT Rule 44bis.1(c))

То:			

LIU, SHEN & ASSOCIATES 10th Floor, Building 1, 10 Caihefang Road, Haidian District Beijing 100080 CHINE

Date of mailing (day/month/year)
26 February 2015 (26.02.2015)

Applicant's or agent's file reference

F13W4862 IMPORTANT NOTICE

International application No.
PCT/CN2013/081639
International filing date (day/month/year)
Priority date (day/month/year)
16 August 2013 (16.08.2013)
17 August 2012 (17.08.2012)

Applicant

FLEXTRONICS AP, LLC et al

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent

Cooperation Treaty)

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Lingfei Bai

Facsimile No. +41 22 338 82 70

e-mail: pt02.pct@wipo.int

### PATENT COOPERATION TREATY

# **PCT**

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference F13W4862	FOR FURTHER ACTION	See item 4 below	
International application No. PCT/CN2013/081639	International filing date (day/month/year) 16 August 2013 (16.08.2013)	Priority date (day/month/year) 17 August 2012 (17.08.2012)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant FLEXTRONICS AP, LLC			

1.			eport on patentability (Chapter I) is issued by the International Bureau on behalf of the y under Rule 44 bis.1(a).
2.	This REI	PORT consists of a total	al of 5 sheets, including this cover sheet.
			ence to the written opinion of the International Searching Authority should be read as a eliminary report on patentability (Chapter I) instead.
3.	This repo	ort contains indications	relating to the following items:
	$\boxtimes$	Box No. I	Basis of the report
		Box No. II	Priority
		Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability ${\bf r}$
		Box No. IV	Lack of unity of invention
	$\boxtimes$	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
		Box No. VI	Certain documents cited
		Box No. VII	Certain defects in the international application
		Box No. VIII	Certain observations on the international application
4.	but not,		ommunicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 cant makes an express request under Article 23(2), before the expiration of 30 months from .

	Date of issuance of this report 17 February 2015 (17.02.2015)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  Lingfei Bai
Facsimile No. +41 22 338 82 70	e-mail: pt02.pct@wipo.int

Form PCT/IB/373 (January 2004)

## PATENT COOPERATION TREATY

T From the	v	WILLIAM TREET	••		
To: 100101	Y		PCT		
A0601, Huibin Building No.8, Beichen Dong (East)		WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY			
Street Chao Yang District Beij	ing,Ciina	(	PCT Rule 43 bis.1)		
LIU, SHEN&ASSOCIA	TES				
		Date of mailing			
		(day/month/year)	28 Nov. 2013 (28.11.2013)		
Applicant's or agent's file reference		FOR FURTHER A	CTION		
F13W4862			See paragraph 2 below		
International application No.	International filing	date(day/month/year)	Priority date (day/month/year)		
PCT/CN2013/081639	16 <b>Aug</b> . <b>2</b> 01	3(16.08.2013)	17 Aug. 2012(17.08.2012)		
International Patent Classification (IPC) or bo	h national classificat	ion and IPC			
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Applicant					
FLEXTRONICS AP, LI	LC et al.				
1 This spiriture subtine is likely and all the	4 - A - C-11 i i t				
1. This opinion contains indications relating	_	ns:			
Box No. I Basis of the opinion  Box No. II Priority					
1 = '	of opinion with regar	d to novelty, inventive	step and industrial applicability		
Box No. IV Lack of unity of inv					
	under Rule 43 <i>bis</i> .1(a ations supporting suc		elty, inventive step or industrial applicability;		
Box No.VI Certain documents		ii statement			
Box No. VII Certain defects in the					
Box No. VIII Certain observation	s on the international	application			
2. FURTHER ACTION					
International Preliminary Examining Au	thority ("IPEA") ex A and the chosen IPE	cept that this does not have notified the Inte	considered to be a written opinion of the ot apply where the applicant chooses an mational Bureau under Rule 66.1 <i>bis</i> (b) that		
	opriate, with amenda	ments, before the expir	A, the applicant is invited to submit to the ation of <b>3</b> months from the date of mailing nichever expires later.		
For further options, see Form PCT/ISA/220.					
3. For further details, see notes to Form P	CT/ISA/220.				
Name and mailing address of the ISA/CN	Date of completion	of this opinion	Authorized officer		
The State Intellectual Property Office, the P.R.China			GAO,Jing		
6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, China 100088	14 Nov. 2013	3 (14.11.2013)			
Facsimile No. 86-10-62019451			Telephone No.		

Form PCT/ISA/237(cover sheet)( July 2009)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/CN2013/081639

Во	x No	. I	Bas	is of the opinion
1.	Wi	h re	gard t	to the language, this opinion has been established on the basis of:
		a	trans	ernational application in the language in which it was filed.  lation of the international application into, which is the language of a translation ed for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2.	□ this		_	inion has been established taking into account the <b>rectification of an obvious mistake</b> authorized by or notified to y under Rule 91(Rule 43bis.1(a))
3.			-	to any <b>nucleotide and/or amino acid sequence</b> disclosed in the international application ,this opinion has been on the basis of :
		a. a	a sequ	nence listing filed or furnished
				on paper
				in electronic form
		b.	time	e of filing or furnishing
				contained in the applicant as filed
				filed together with the application in electronic form
				furnished subsequently to this Authority for the purposes of search
4.		stat	temen	on, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required ts that the information in the subsequent or additional copies is identical to that in the application as filed or does not do the application as filed, as appropriate, were furnished.
5.	Ado	litio	nal co	omments:

Form PCT/ISA/237(Box No. I) (July 2009)

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/CN2013/081639

NO

 Citations and explanations supporting such statement

 1. Statement:
 Novelty (N)
 Claims I-20
 YES

 Claims Inventive step (IS)
 None
 NO

 Claims Inventive step (IS)
 Claims I-20
 NO

 Industrial applicability (IA)
 Claims I-20
 YES

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;

### 2. Citations and explanations

Box No. V

Reference is made to the following documents:

D1: CN 101540850 A (SHENZHEN TCL NEW TECHNOLOGY LTD.) 23 Sep. 2009 (23.09.2009)

Claims None

D2: CN 101567992 A (ALI CORP.) 28 Oct. 2009 (28.10.2009)

#### I. Novelty and Inventive step

1.1 Independent claim 1 relates to a method. D1 (see page 3, lines 4-9, lines 14-15, lines 20-21, page 4, lines 1-4, page 5, lines 19-22 in the description, figures 1, 2, 5) is regarded as the closest prior art, and discloses a method for selecting media source as follows.

The electronic device 100 comprises at least one receptor 102 (e.g., a cable inlet, device inlet, or an antenna), a tuner 104, a processor 106, a memory 108, a display 110, a controller 112 (e.g., remote control), and various peripheral inputs 114,116, and 118. The memory 108 may comprise a tangible machine-readable medium adapted to hold machine-readable computer code that causes the processor 106 to perform an exemplary method in accordance with present embodiments. For example, the memory 108 and the processor 106 may cooperate to operate as a control system that provides an on-screen selection interface (corresponding to "reminder") in accordance with present embodiments (see page 3, lines 4-9 in the description and figure 1 of D1).

This UI or on-screen selection interface may be referred to as a tab-based content source selection system (TCSSS) (see page 3, lines 14-15 in the description of D1).

An interpreted "content" command from a remote control may initiate or activate the TCSSS on a television (corresponding to "receiving a reminder presentation input at the intelligent TV") (see page 3, lines 20-21 in the description of D1).

The TCSSS may provide several graphic items that appear to be overlapping graphical shapes (e.g., columns or tabs) on the television display 110. For example, FIG. 2 illustrates a screen 200 (corresponding to "the first portion of the display") of a television display (e.g., the display 110) that includes a menu 202 positioned on an edge of the display (corresponding to "the second portion of the display, wherein the second portion of the display at least partially overlaps the first portion"). The menu 202 includes four overlapping columns in accordance with present embodiments (see page 4, lines 1-4 in the description and figure 2 of D1).

FIG. 5 is an illustration of the TCSSS when the fourth column 210 is active. As set forth above, the fourth column 210 displays user-selected channels referred to as "favorites" when it is active. The fourth column 210 of the illustrated embodiment enables users to define it to include any source of input and any channel on a single menu tab (corresponding to "the reminder presentation dialog includes information relative to a specific program"). This will enable a user to conveniently switch between favorite channels and favorite sources of input within a single menu tab or column (see page 5, lines 19-22 in the description and figure 5 of D1).

D1 does not disclose the following features of claim 1: TV content presented to a first portion of the display. Thus D1 does not disclose all the features of claim 1 and the subject matter of claim 1 is new in the sense of PCT Article 33(2).

However, D2 (see page 5, lines 27-30 in the description) provides a method for displaying assistance data and discloses the following features: when digital channel content is broadcast, assistance information is displayed to a portion the screen 400. That is, D2 gives the teach to display TV content in a first portion and to display reminding assistance information in a second portion which overlaps the first portion. Thus, it is obvious for a person skilled in the art to apply the teaching of the D2 to D1 and arrive at this solution. Therefore the solution of claim 1 does not involve an inventive step, and does not meet the criteria set out in PCT Article 33(3).

Form PCT/ISA/237(Box No. V) (July 2009)

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/CN2013/081639

### Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of : Box No. V Citations and explanations

1.2 Independent claim 13 relates to a tangible, non-transitory computer readable medium having instructions stored thereon that, when executed by a processor, performed the method as the same as claim 1. D1 (see page 3, lines 7-8 in the description) also discloses that: The memory 108 may comprise a tangible machine-readable medium adapted to hold machine-readable computer code that causes the processor 106 to perform an exemplary method in accordance with present embodiments. Thus, referring to the explanations on claim 1, claim 13 is also new in the sense of PCT Article 33(2), and does not involve an inventive step in the sense of PCT Article 33(3).

1.3 Since the subject matter of claims 1, 13 involves novelty, the subject matter of their dependent claims 2-12, 14-19 also involves novelty in the sense of PCT Article 33(2).

Additional features of claims 2, 14 are also disclosed by D1(see page 5, lines 19-22 in the description and figure 5). Thus the subject matter of claims 2, 14 does not involve an inventive step in the sense of PCT Article 33(3).

Additional features of claims 3-12, 15-19 only relate to normal implementation measures or minor design details in the art. The features thus, either alone or in combination, do not seem to add anything of inventive significance to any of claims 3-12, 15-19, and they do not meet the criteria set out in PCT Article 33(3).

I.4 Independent claim 20 relates to a system. D1 (see page 3, lines 4-9, lines 14-15, lines 20-21, page 4, lines 1-4, page 5, lines 19-22 in the description, figure 1, 2, 5) is regarded as the closest prior art, and discloses a system for selecting media source as follows.

The electronic device 100 comprises at least one receptor 102 (e.g., a cable inlet, device inlet, or an antenna), a tuner 104, a processor 106, a memory 108, a display 110, a controller 112 (e.g., remote control), and various peripheral inputs 114,116, and 118. The memory 108 may comprise a tangible machine-readable medium adapted to hold machine-readable computer code that causes the processor 106 to perform an exemplary method in accordance with present embodiments. For example, the memory 108 and the processor 106 may cooperate to operate as a control system that provides an on-screen selection interface (corresponding to "reminder") in accordance with present embodiments (see page 3, lines 4-9 in the description and figure 1 of D1).

This UI or on-screen selection interface may be referred to as a tab-based content source selection system (TCSSS) (see page 3, lines 14-15 in the description of D1).

An interpreted "content" command from a remote control may initiate or activate the TCSSS on a television (corresponding to "receiving a reminder presentation input at the intelligent TV") (see page 3, lines 20-21 in the description of D1).

The TCSSS may provide several graphic items that appear to be overlapping graphical shapes (e.g., columns or tabs) on the television display 110. For example, FIG. 2 illustrates a screen 200 (corresponding to "the first portion of the display") of a television display (e.g., the display 110) that includes a menu 202 positioned on an edge of the display (corresponding to "the second portion of the display, wherein the second portion of the display at least partially overlaps the first portion"). The menu 202 includes four overlapping columns in accordance with present embodiments (see page 4, lines 1-4 in the description and figure 2 of D1).

FIG. 5 is an illustration of the TCSSS when the fourth column 210 is active. As set forth above, the fourth column 210 displays user-selected channels referred to as "favorites" when it is active. The fourth column 210 of the illustrated embodiment enables users to define it to include any source of input and any channel on a single menu tab (corresponding to "the reminder presentation dialog includes information relative to a specific program"). This will enable a user to conveniently switch between favorite channels and favorite sources of input within a single menu tab or column (see page 5, lines 19-22 in the description and figure 5 of D1).

D1 does not disclose the following features of claim 20: (1) the tuner is configured to receive and convert broadcast content signals to be displayed by the display; (2) TV content presented to a first portion of the display. Thus D1 does not disclose all the features of claim 20 and the subject matter of claim 20 is new in the sense of PCT Article 33(2).

However, the aforementioned feature (1) is common design in the art. As for feature (2), D2 (see page 5, lines 27-30 in the description) provides a method for displaying assistance data and discloses the following features: when digital channel content is broadcast, assistance information is displayed to a portion the screen 400. That is, D2 gives the teach to display TV content in a first portion and to display reminding assistance information in a second portion which overlaps the first portion. Thus, it is obvious for a person skilled in the art to apply the teaching of the D2 and common design in the art to D1 and arrive at this solution. Therefore the solution of claim 20 does not involve an inventive step, and does not meet the criteria set out in PCT Article 33(3).

#### II. Industrial applicability

The invention of claims 1-20 can find industrial applicability in the technical field of TV broadcast, and meets the criteria set out in PCT Article 33(4).

Form PCT/ISA/237(Supplemental Box ) (July 2009)

Electronic Patent <i>I</i>	<b>Ap</b> p	olication Fee	Transmi	ttal	
Application Number:	139	968665			
Filing Date:	16-	Aug-2013			
Title of Invention:	PA	NEL USER INTERFAC	E FOR AN INTE	LLIGENT TELEVISIO	DΝ
First Named Inventor/Applicant Name:	Sai	njiv Sirpal			
Filer:	Douglas W. Swartz/Robert Roe-Pachirat				
Attorney Docket Number:	65	33-488			
Filed as Large Entity					
Filing Fees for Utility under 35 USC 111(a)					
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:					
Pages:					
Claims:					
Miscellaneous-Filing:					
Petition:					
Patent-Appeals-and-Interference:					
Post-Allowance-and-Post-Issuance:					
Extension-of-Time:					

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
	Tot	al in USD	(\$)	180

Electronic Ack	Electronic Acknowledgement Receipt			
EFS ID:	21767148			
Application Number:	13968665			
International Application Number:				
Confirmation Number:	7370			
Title of Invention:	PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION			
First Named Inventor/Applicant Name:	Sanjiv Sirpal			
Customer Number:	111285			
Filer:	Douglas W. Swartz/Robert Roe-Pachirat			
Filer Authorized By:	Douglas W. Swartz			
Attorney Docket Number:	6583-488			
Receipt Date:	13-MAR-2015			
Filing Date:	16-AUG-2013			
Time Stamp:	16:35:06			
Application Type:	Utility under 35 USC 111(a)			

## **Payment information:**

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$180
RAM confirmation Number	3281
Deposit Account	191970
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

File Listin	g:				
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		6583-488_IDS_04.pdf	416244	yes	9
'		0303-400_iD3_04.pdi	17f8035691d5ee9e5b7f498fed822b22cd4e 6335	yes	9
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	Transmittal l	Letter	1		3
	Information Disclosure Stater	nent (IDS) Form (SB08)	4		9
Warnings:					
Information:					
2	Non Patent Literature	6583-487-	802359	no	6
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Information:					
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

## New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

## National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

## New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	) Group Art Unit: 2421	
Sanjiv Sirpal	Confirmation No.: 7370	
Serial No.: 13/968,665	Examiner: James R. Marandi	
Filed: August 16, 2013 Atty. File No.: 6583-488	) <u>SUPPLEMENTAL</u> ) <u>INFORMATION DISCLOSURE</u>	
Entitled: "Panel User Interface for an Intelligent Television"	) STATEMENT ) Electronically Submitted	
Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450		
Dear Commissioner:		
The references cited on attached Form PTO/	SB08 are being called to the attention of the	
Examiner.		
Copies of the cited non-patent and/or foreign	references are enclosed herewith.	
Copies of the cited U.S. patents and/or patent	applications are enclosed herewith.	
Copies of the cited U.S. patents/unpublis	shed patent applications/patent application	
publications are not enclosed in accordance with 37	C.F.R. § 1.98(a).	
Copies of the cited references are not enclosed	sed, in accordance with 37 C.F.R. § 1.98(d),	
because the references were cited by or submitted	to the U.S. Patent and Trademark Office in	
prior application Serial No filed	, which is relied upon for an	
earlier filing date under 35 U.S.C. § 120.		
To the best of applicants' belief, the pertin	nence of the foreign-language references is	
believed to be summarized in the attached Englis	h abstracts and/or in the figures, although	
applicants do not necessarily vouch for the accuracy	of the translation.	
Examiner's attention is drawn to the following	g related applications:	
Serial No filed	(Attorney Ref. No)	
Serial No filed  Other:	(Attorney Ref. No)	
Other:		
Submission of the above information is not in	ntended as an admission that any item is	
citable under the statutes or rules to support a rejection	on, that any item disclosed represents	
analogous art, or that those skilled in the art would re-	efer to or recognize the pertinence of any	
reference without the benefit of hindsight, nor should	d an inference be drawn as to the pertinence	

of the references based on the order in which they are presented. Submission of this statement should not be taken as an indication that a search has been conducted, or that no better art exists.

It is respectfully requested that the cited information be expressly considered during the prosecution of this application and the references made of record therein.

# **FEES**

37 CFR 1.97(b): No fee is believed due in connection with this submission, because the information disclosure statement submitted herewith is satisfied by one of the following conditions ("X" indicates satisfaction):					
Within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d), or					
Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application, or					
Before the mailing date of a first Office Action on the merits, or					
Before the mailing of a first Office action after the filing of a request for continued examination under 37 CFR 1.114.					
Although no fee is believed due, if any fee is deemed due in connection with this submission, please charge such fee to Deposit Account 19-1970.					
37 CFR 1.97(c): The information disclosure statement transmitted herewith is being filed after all the above conditions (37 CFR 1.97(b)), but before the mailing date of any one of the following conditions:  (1) a final action under 37 C.F.R. 1.113, or (2) a notice of allowance under 37 C.F.R. 1.311, or (3) an action that otherwise closes prosecution in the application.  This Information Disclosure Statement is accompanied by:  A Certification (below) as specified by 37 C.F.R. 1.97(e). Although no fee is believed due, if any fee is deemed due in connection with this submission, please charge such fee to Deposit Account 19-1970.  OR  Please charge Deposit Account 19-1970 in the amount of \$180.00 for the fee set forth in 37 C.F.R. 1.17(p) for submission of an information disclosure statement. Please credit any overpayment or charge any underpayment to Deposit Account 19-1970.					
This information Disclosure Statement is being submitted after the period specified in 37 CFR 1.97(c).  This information Disclosure Statement includes a Certification (below) as specified by 37 C.F.R. 1.97(e)  AND  Applicants hereby requests consideration of the reference(s) disclosed herein. Please charge Deposit Account 19-1970 in the amount of \$180.00 under 37 C.F.R. 1.17(p). Please credit any overpayment or charge any underpayment to Deposit Account 19-1970. Election to pay the fee should not be taken as an indication that applicant(s) cannot execute a certification.					

	Certification (37 C.F.R. 1.97(e)) (Applicable only if checked)						
	The undersigned certifies that:  Each item of information contained in the Information Disclosure State submitted herewith was first cited in any communication from a foreign patent of in a counterpart foreign application not more than three months prior to the filing this statement. 37 C.F.R. 1.97(e)(1).  A copy of the communication from the foreign patent office is enclosed.						
	OR						
	No item of information contained in the Information Disclosure Statement submitted herewith was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement. 37 C.F.R. 1.97(e)(2).						
	Respectfully submitted,						
	SHERIDAN ROSS P.C.						
Date:	By: /Douglas W. Swartz/ Douglas W. Swartz Registration No. 37739 1560 Broadway, Suite 1200 Denver, Colorado 80202-5141 (303) 863-9700						

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of: SANJIV SIRPAL	Group Art Unit: 2421
Application No.: 13/968,665	Examiner: MARANDI, JAMES R.
Filed: August 16, 2013	Confirmation No.: 7370
Atty. File No.: 6583-488	) )

For: "PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION"

# **AMENDMENT AND RESPONSE**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# Commissioner:

Applicants submit this Amendment and Response to address the non-final Office Action having a mailing date of October 9, 2014. Please credit any overpayment or charge any underpayment to Deposit Account No. 19-1970.

Please amend the above-identified patent application as follows:

**Amendments to the Claims** are shown in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 8 of this paper.

## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

# Listing of Claims:

1. (Currently Amended) A method for displaying content on a television, comprising:

receiving a first input via an input device associated with the television; in response to the first input, displaying, via the television, an application panel interface; determining content currently being shown on the television;

identifying at least one of a content source and a second content information associated with the content currently being displayed via the television;

based on the content and the at least one of the content source and the content information, providing a first content panel in the application panel interface, wherein the first content panel is a first type of application panel;

receiving a first directional input via an-the input device associated with the television; determining, based on a first direction associated with the first directional input, a second content panel to display via the television in the application panel interface, wherein the second content panel is a second type of application panel;

retrieving, from a memory, a first content information for displaying in the content panel; identifying at least one of a content source and a second content information currently being displayed via the television;

selecting a panel type based on the identified at least one of content source and second content information currently being displayed via the television;

retrieving, from memory, a <u>third-second</u> content information based on the <u>selected second</u> <u>type of content panel-type</u>; and

displaying, via the television, the retrieved first content information and the thirdsecond content information in the second content panel based on the selected panel type.

 (Currently Amended) The method of claim 1, further comprising: retrieving, from a memory, a first image that is representative of the at least one of content source and second-the content information; and

2

displaying, via the television, the first image in the <u>first or second</u> content panel.

- 3. (Currently Amended) The method of claim 1, wherein the content panel is an application panel interface is provided in a portion of the display of the television.
- 4. (Currently Amended) The method of claim 1, further comprising: receiving a second directional input via the input device; and determining, based on a second direction associated with the second directional input, a second third content panel to display via the television.
  - 5. (Currently Amended) The method of claim 1, further comprising: receiving a second directional input via the input device;

determining, based on a second direction associated with the second directional input, a source of at least one content information to be displayed in the content panel based on the selected panel type;

retrieving at least a portion of the at least one-content information from the determined content source; and

displaying, via the television, the content information associated with the determined source.

- 6. (Currently Amended) The method of claim 1, wherein the third-second content information comprises information associated with content information marked as favorite.
- 7. (Currently Amended) The method of claim 1, wherein the <u>third second</u> content information comprises information associated with TV series episode content information.
- 8. (Currently Amended) The method of claim 1, wherein the selected second type of content panel type is a search panel.
- 9. (Currently Amended) The method of claim 1, wherein the selected second type of content panel type is a recommended panel.

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10. (Currently Amended) A non-transitory computer readable information storage medium having stored thereon instructions that cause a computing system to execute a method of displaying content on a television, comprising:

while a first content panel is being displayed in an application panel interface, receiving a first directional input via an input device associated with the television, wherein the first content panel is a first type of application panel;

determining, based on a first direction associated with the first directional input, a <u>second</u> content panel to display via the television in the <u>application panel</u> interface, wherein the <u>second</u> content panel is a second type of application panel;

retrieving, from a memory, a first content information for displaying in the content panel; identifying at least one of a content source and a second content information currently being displayed via the television;

selecting a panel type based on the identified at least one of content source and second content information currently being displayed via the television;

retrieving, from memory, a third-content information based on the selected second type of panel-type; and

displaying, via the television, the retrieved first content information and the third-content information in the second content panel based on the selected panel type.

11. (Currently Amended) The non-transitory computer-readable medium of claim 10, wherein the instructions further comprise:

retrieving, from a memory, a first image that is representative of the at least one of the content source and second content information; and

displaying, via the television, the first image in the second content panel.

12. (Currently Amended) The non-transitory computer-readable medium of claim 10, wherein the <u>application panel interface is provided in a portion of the display of the television-content panel is an application panel</u>.

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- 13. (Currently Amended) The non-transitory computer-readable medium of claim 10, wherein the third-content information comprises information associated with content information marked as favorite.
- 14. (Currently Amended) The non-transitory computer-readable medium of claim 10, wherein the selected second type of content panel type is a search panel, and wherein the instructions further comprise:

receiving a second directional input via the input device;

determining, based on a second direction associated with the second directional input, a source of at least one content information to be displayed in the a third content panel based on the search panel;

retrieving at least a portion of the at least one <u>second</u> content information from the determined source; and

displaying, via the television, the <u>second</u> content information associated with the determined source.

- 15. (Currently Amended) The non-transitory computer-readable medium of claim 10, wherein the third-content information comprises information associated with TV series episode content information, and wherein the second type of contentselected panel type-is an info panel associated with the TV series episode content information.
- 16. (Currently Amended) A system for displaying content on a television, comprising:

an input device associated with the television;

a memory; and

a microprocessor operable to:

receive a first input via an input device associated with the television; in response to the first input, display, via the television, an application panel

interface;

determine content currently being shown on the television;

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identify at least one of a content source and content information associated with the content currently being displayed via the television;

based on the content and the at least one of the content source and the content information, provide a first content panel in the application panel interface, wherein the first content panel is a first type of application panel;

receive a first directional input via an-the input device associated with the television;

determine, based on a first direction associated with the first directional input, a content panel to display via the television in the application panel interface, wherein the second content panel is a second type of application panel;

retrieve, from a memory, a first content information for displaying in the content panel;

identify at least one of a content source and a second content information currently being displayed via the television;

select a panel type based on the identified at least one of content source and second content information currently being displayed via the television;

retrieve, from memory, a <u>third-second</u> content information based on the <u>second</u> type of content <u>selected-panel-type</u>; and

display, via the television, the retrieved first content information and the thirdsecond content information in the second content panel based on the selected panel type.

17. (Currently Amended) The system of claim 16, wherein the microprocessor is further operable to:

retrieve, from a memory, a first image that is representative of the at least one of content source and second-the content information; and

display, via the television, the first image in the <u>first or second</u> content panel.

18. (Currently Amended) The system of claim 16, wherein the <u>application panel</u> interface is provided in a portion of the display of the television content panel is an application panel.

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19. (Currently Amended) The system of claim 16, wherein the microprocessor is further operable to:

receive a second directional input via the input device;

determine, based on a second direction associated with the second directional input, a source of at least one content information to be displayed in the content panel based on the selected panel type;

retrieve at least a portion of the at least one-content information from the determined source; and

display, via the television, the content information associated with the determined source.

20. (Currently Amended) The system of claim 16, wherein the third second content information comprises information associated with content information marked as favorite.

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## **REMARKS/ARGUMENTS**

## Status of the Claims

In the Office Action mailed October 9, 2014, claims 1-20 were pending in the application. Claims 1-20 are amended. No claims have been added or canceled. Therefore, claims 1-20 are present for examination. No new matter has been added by these amendments. Claims 1, 10, and 16 are independent claims. Applicants respectfully request reconsideration of this application as amended.

## Interview Summary

Applicants would like to thank the Examiner Marandi for his time during the phone interview on December 23, 2014. Examiner Marandi and Applicants' representative, Tadd Wilson, discussed the current rejection to clarify the issues at hand, discussed possible additions to the claims, and differences between the cited art and the present claims. Per agreement reached during the Interview, the current claim amendments overcome the rejection. Again, Applicants appreciate the Examiner's attention and assistance.

## Rejections Under 35 U.S.C. §102

Claims 1-20 were rejected under 35 U.S.C. §102(a)(1) as anticipated by U.S. Publication No. 2012/0174039 to Rhodes ("Rhodes"). Applicants respectfully traverse the anticipation rejection. Applicants respectfully request reconsideration of the rejection because either the Examiner has failed to show a *prima facie* case of anticipation or the amendments overcome the rejection. Indeed, "for anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly." *See* MPEP § 2143, Original Ninth Edition, March 2014. And, Rhodes simply does not teach each and every aspect of the claims.

Per agreement reached during the Interview summarized, the current claim amendments overcome the rejection.

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# **CONCLUSION**

In view of the foregoing, Applicants believe all claims now pending in this Application are in a condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested. Applicants do not acquiesce to any objection, rejection, or argument not specifically addressed herein. Rather, the Applicants believe the amendments and arguments contained herein overcome all objections, rejections, or arguments.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (303) 863-2987.

The Commissioner is hereby authorized to charge to deposit account number 19-1970 any fees under 37 CFR § 1.16 and 1.17 that may be required by this paper and to credit any overpayment to that Account. If any extension of time is required in connection with the filing of this paper and has not been separately requested, such extension is hereby petitioned.

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Respectfully submitted,

SHERIDAN ROSS P.C.

Date: January 9, 2015 By: /Tadd F. Wilson/

Tadd F. Wilson Reg. No. 54,544

1560 Broadway, Suite 1200 Denver, Colorado 80202 Telephone: 303-863-9700

Attorney Docket No.: 6583-488

Electronic Acknowledgement Receipt					
EFS ID:	21173617				
Application Number:	13968665				
International Application Number:					
Confirmation Number:	7370				
Title of Invention:	PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION				
First Named Inventor/Applicant Name:	Sanjiv Sirpal				
Customer Number:	111285				
Filer:	Tadd Fjelp Wilson/Kathy Johnston				
Filer Authorized By:	Tadd Fjelp Wilson				
Attorney Docket Number:	6583-488				
Receipt Date:	09-JAN-2015				
Filing Date:	16-AUG-2013				
Time Stamp:	17:05:49				
Application Type:	Utility under 35 USC 111(a)				

# **Payment information:**

Submitted wi	th Payment	no	no			
File Listin	g:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)	
			13/1999			

AMEND\_01\_6583-488.pdf

221b0d16cacbac71345a23c2113d378bc54 42222 yes

	Multipart Description/PDF files in .zip description						
	Document Description	Start	End				
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1				
	Claims	2	7				
	Applicant Arguments/Remarks Made in an Amendment	8	9				
Warnings:							
Information:							
	Total Files Size (in bytes):	13	34999				

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

## New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

## New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

U.S. Parent and Trademark Office; U.S. DEPARTIMENT OF COMMERCIA.

P	PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875					Application	n or Docket Number /968,665	Filing Date 08/16/2013	To be Mailed
							ENTITY: 🛛 L	ARGE SMA	LL MICRO
					ATION AS FIL	ED – PAR	TI		
			(Column <sup>-</sup>	1)	(Column 2)			_	
Ļ	FOR		NUMBER FIL	_ED	NUMBER EXTRA		RATE (\$)	F	EE (\$)
Ľ	BASIC FEE (37 CFR 1.16(a), (b), (	or (c))	N/A		N/A		N/A		
	SEARCH FEE (37 CFR 1.16(k), (i), o	or (m))	N/A		N/A		N/A		
	EXAMINATION FE (37 CFR 1.16(o), (p),		N/A		N/A		N/A		
	TAL CLAIMS CFR 1.16(i))	City	mir	nus 20 = *			X \$ =		
IND	EPENDENT CLAIM	S	m	inus 3 = *			X \$ =		
	(37 CFR 1.16(h))  If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
* If t	MULTIPLE DEPEN		•				TOTAL		
H	are amoremee in con-	1 10 1000 1110	2010, 0110	. o in column 2.			1017.2		
		(Column 1)		APPLICATION (Column 2)	Oolumn 3		ART II		
.NT	01/09/2015	CLAIMS REMAINING AFTER AMENDMEN <sup>T</sup>		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EX	TRA	RATE (\$)	ADDITIO	ONAL FEE (\$)
ME	Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0		× \$80 =		0
AMENDMENT	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0		× \$420 =		0
AM	Application Si	tion Size Fee (37 CFR 1.16(s))							
	FIRST PRESEN	ITATION OF MUL	ΓIPLE DEPEN	DENT CLAIM (37 CFF	R 1.16(j))				
							TOTAL ADD'L FEI	E	0
		(Column 1)		(Column 2)	(Column 3)	)			
		CLAIMS REMAINING AFTER AMENDMEN		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EX	TRA	RATE (\$)	ADDITIO	ONAL FEE (\$)
ENT	Total (37 CFR 1.16(i))	skr	Minus	Ne Ne	=		X \$ =		
ENDM	Independent (37 CFR 1.16(h))	*	Minus	***	=		X \$ =		
	Application Size Fee (37 CFR 1.16(s))								
AM	FIRST PRESEN	TATION OF MUL	ΓIPLE DEPEN	DENT CLAIM (37 CFF	R 1.16(j))				
							TOTAL ADD'L FEI	E	
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This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS

ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/968,665	08/16/2013	Sanjiv Sirpal	6583-488	7370
111285 7590 12/31/201- Sheridan Ross P.C.		4	EXAM	IINER
1560 Broadway Suite 1200			MARANDI	, JAMES R
Denver, CO 80202			ART UNIT	PAPER NUMBER
			2421	
			NOTIFICATION DATE	DELIVERY MODE
			12/31/2014	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com edocket@sheridanross.com

	Application No.	Applicant(s)								
Applicant-Initiated Interview Summary	13/968,665	SIRPAL ET AL.								
Applicant-initiated interview Cumhary	Examiner	Art Unit								
	James R. Marandi	2421								
All participants (applicant, applicant's representative, PTO personnel):										
(1) <u>James R. Marandi</u> . (3)										
(2) <u>Tadd F. Wilson, Eqs.</u> . (4)										
Date of Interview: 23 December 2014.										
Type: 🛛 Telephonic 🔲 Video Conference 🔲 Personal [copy given to: 🔲 applicant [	applicant's representative]									
Exhibit shown or demonstration conducted: X Yes [ If Yes, brief description: Smart TV screen, showing promenus.	☐ No. grams, while directional comn	nands initiating various								
Issues Discussed 101 112 112 103 103 Other (For each of the checked box(es) above, please describe below the issue and detailed										
Claim(s) discussed: 1.										
Identification of prior art discussed: Rhoads; USPGPUB 20	<u>12/0174039</u> .									
Substance of Interview (For each issue discussed, provide a detailed description and indicate if agreement reference or a portion thereof, claim interpretation, proposed amendments, arguments.)		dentification or clarification of a								
Mr. Wilson provided an overview of the invention along with	n a live demonstration of featu	res/ functionalities.								
Discussion followed around ways to amend the claims to be	tter represent the invention wi	hile overcoming Rhoads.								
No agreements were reached.										
Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview										
<b>Examiner recordation instructions</b> : Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.										
☐ Attachment										
/James R Marandi/ Examiner, Art Unit 2421										

## **Summary of Record of Interview Requirements**

## Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

#### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

## 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
  - (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

## **Examiner to Check for Accuracy**

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Substitute for form 1449/PTO

Sheet

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of

4

Complete if Known				
Application Number	13/968,665			
Filing Date	August 16, 2013			
First Named Inventor	Sanjiv Sirpal			
Art Unit	2421			
Examiner Name	James R. Marandi			
Attorney Docket Number	6583-488			

			U.S. PATENT DO		
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-kind Code <sup>2 (if known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	5867227	02/02/1999	Yamaguchi	
	2	6047319	04/04/2000	Olson	
	3	6111614	08/29/2000	Mugura et al.	
	4	6766526	07/20/2004	Ellis	
	5	7623933	11/24/2009	Sarosi et al.	
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	8	8065390	11/22/2011	Cheng	
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	11	8516519	08/20/2013	Lee	
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	20	2005/0289603	12/29/2005	Cezeaux et al.	
	21	2006/0090183	04/27/2006	Zito et al.	
	22	2006/0143674	06/29/2006	Jones et al.	
	23	2007/0192715	08/16/2007	Kataria et al.	
	24	2007/0199022	08/23/2007	Moshiri et al.	
	25	2007/0250762	10/25/2007	Mansfield	
	26	2007/0250864	10/25/2007	Diaz Perez	
	27	2008/0092198	04/17/2008	Hutten	
	28	2008/0163307	07/03/2008	Coburn et al.	
	29	2008/0235595	09/25/2008	Krantz et al.	
	30	2009/0106793	04/23/2009	Tecot et al.	
	31	2009/0150379	06/11/2009	Park et al.	
	32	2009/0177981	07/09/2009	Christie et al.	

Examiner	Date	
Signature	Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO

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Sheet

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of

Col	mplete if Known
Application Number	13/968,665
Filing Date	August 16, 2013
First Named Inventor	Sanjiv Sirpal
Art Unit	2421
Examiner Name	James R. Marandi
Attorney Docket Number	6583-488

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34	2009/0241048	09/24/2009	Augustine et al.
35	2010/0071019	03/18/2010	Blanchard et al.
36	2010/0107112	04/29/2010	Jennings et al.
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38	2011/0022450	01/27/2011	Meredith
39	2011/0023608	02/03/2011	Rueger
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41	2011/0145881	06/16/2011	Hartman et al.
42	2011/0161996	06/30/2011	Hamano et al.
43	2011/0167452	07/07/2011	Baumgartner et al.
44	2012/0030317	02/02/2012	Smyth et al.
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47	2012/0284752	11/08/2012	Christie
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52	2014/0040819	02/06/2014	Duffy

	FOREIGN PATENT DOCUMENTS					
Examiner Initials*	No. <sup>1</sup>	Foreign Patent Document  Country Code <sup>3</sup> ; Number <sup>4</sup> ; Kind Code <sup>5</sup> ( <i>if known</i> )	Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>

	NON-PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
	53	Official Action for U.S. Patent Application No. 13/969,846, mailed Aug. 15, 2014 (Attorney's Ref. No. 6583-426) 19 pages			
	54	Official Action for U.S. Patent Application No. 13/969,869, mailed Sep. 16, 2014 (Attorney's Ref. No. 6583-428) 20 pages			

Examiner	Date	
Signature	Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Substitute for form 1449/PTO

Application Number 13/968,665

INFORMATION DISCLOSURE Filing Date August 16, 2013

STATEMENT BY APPLICANT First Named Inventor Sanjiv Sirpal

Art Unit 2421

Examiner Name James R. Marandi

Attorney Docket Number

6583-488

4

3

Sheet

of

No. 6583-499) 13 pages

55	Official Action for U.S. Patent Application No. 13/969,880, mailed Sep. 11, 2014 (Attorney's Ref. No. 6583-431) 10 pages
56	Official Action for U.S. Patent Application No. 13/969,884, mailed Oct. 23, 2014 (Attorney's Ref. No. 6583-432) 20 pages
57	Official Action for U.S. Patent Application No. 13/969,887, mailed Oct. 23, 2014 (Attorney's Ref. No. 6583-433) 16 pages
58	Official Action for U.S. Patent Application No. 13/969,482, mailed Oct. 21, 2014 (Attorney's Ref. No. 6583-434) 22 pages
59	Official Action for U.S. Patent Application No. 13/969,485, mailed Oct. 02, 2014 (Attorney's Ref. No. 6583-435) 21 pages
60	Official Action for U.S. Patent Application No. 13/970,388, mailed Sep. 04, 2014 (Attorney's Ref. No. 6583-436) 14 pages
61	Official Action for U.S. Patent Application No. 13/970,398, mailed Sep. 02, 2014 (Attorney's Ref. No. 6583-437) 14 pages
62	Official Action for U.S. Patent Application No. 13/970,420, mailed Oct. 09, 2014 (Attorney's Ref. No. 6583-439) 15 pages
63	Official Action for U.S. Patent Application No. 13/970,427, mailed Sep. 30, 2014 (Attorney's Ref. No. 6583-440) 24 pages
64	Official Action for U.S. Patent Application No. 13/970,442, mailed Oct. 07, 2014 (Attorney's Ref. No. 6583-441) 10 pages
65	Official Action for U.S. Patent Application No. 13/969,588, mailed Nov. 10, 2014 (Attorney's Ref. No. 6583-452) 11 pages
66	Official Action for U.S. Patent Application No. 13/969,487, mailed Sep. 11, 2014 (Attorney's Ref. No. 6583-455) 10 pages
67	Official Action for U.S. Patent Application No. 13/969,491, mailed Oct. 08, 2014 (Attorney's Ref. No. 6583-457) 21 pages
68	Official Action for U.S. Patent Application No. 13/864,214, mailed Aug. 19, 2014 (Attorney's Ref. No. 6583-469) 17 pages
69	Official Action for U.S. Patent Application No. 13/969,506, mailed Oct. 02, 2014 (Attorney's Ref. No. 6583-480) 9 pages
70	Official Action for U.S. Patent Application No. 13/968,897, mailed Aug. 15, 2014 (Attorney's Ref. No. 6583-489) 15 pages
71	Official Action for U.S. Patent Application No. 13/970,234, mailed Aug. 12, 2014 (Attorney's Ref. No. 6583-496) 19 pages
72	Official Action for U.S. Patent Application No. 13/968,969, mailed Aug. 19, 2014 (Attorney's Ref. No. 6583-498) 14 pages
73	Official Action for U.S. Patent Application No. 13/968,610, mailed Aug. 19, 2014 (Attorney's Ref.

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П	Examiner	Date	
-	Signature	Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

Sı	Substitute for form 1449/PTO			Complete if Known	
				Application Number	13/968,665
INFORMATION DISCLOSURE				Filing Date	August 16, 2013
S	STATEMENT BY APPLICANT			First Named Inventor	Sanjiv Sirpal
	(Use as many sheets as necessary)			Art Unit	2421
				Examiner Name	James R. Marandi
Sheet	4	of	4	Attorney Docket Number	6583-488

74	Official Action for U.S. Patent Application No. 13/968,630, mailed Jul. 31, 2014 (Attorney's Ref. No. 6583-504) 9 pages
75	Official Action for U.S. Patent Application No. 13/969,507, mailed Aug. 29, 2014 (Attorney's Ref. No. 6583-508) 30 pages
76	Official Action for U.S. Patent Application No. 13/969,508, mailed Nov. 07, 2014 (Attorney's Ref. No. 6583-510) 10 pages
77	Official Action for U.S. Patent Application No. 13/969,510, mailed Nov. 03, 2014 (Attorney's Ref. No. 6583-511) 16 pages
78	Official Action for U.S. Patent Application No. 13/970,243, mailed Aug. 22, 2014 (Attorney's Ref. No. 6583-519) 20 pages

Examiner	Date	
Signature	Considered	

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Electronic Patent Application Fee Transmittal					
Application Number:	13968665				
Filing Date:	16-	-Aug-2013			
Title of Invention:	PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION				
First Named Inventor/Applicant Name:	Sanjiv Sirpal				
Filer:	Douglas W. Swartz/Robert Roe-Pachirat				
Attorney Docket Number:	6583-488				
Filed as Large Entity					
Utility under 35 USC 111(a) Filing Fees					
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:					
Pages:					
Claims:					
Miscellaneous-Filing:					
Petition:					
Patent-Appeals-and-Interference:					
Post-Allowance-and-Post-Issuance:					
Extension-of-Time:					

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
	Tot	al in USD	(\$)	180

Electronic Acknowledgement Receipt			
EFS ID:	20707082		
Application Number:	13968665		
International Application Number:			
Confirmation Number:	7370		
Title of Invention:	PANEL USER INTERFACE FOR AN INTELLIGENT TELEVISION		
First Named Inventor/Applicant Name:	Sanjiv Sirpal		
Customer Number:	111285		
Filer:	Douglas W. Swartz/Robert Roe-Pachirat		
Filer Authorized By:	Douglas W. Swartz		
Attorney Docket Number:	6583-488		
Receipt Date:	14-NOV-2014		
Filing Date:	16-AUG-2013		
Time Stamp:	18:46:54		
Application Type:	Utility under 35 USC 111(a)		

# **Payment information:**

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$180
RAM confirmation Number	5325
Deposit Account	191970
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		6583-488_IDS_03.pdf	305978	yes	7
·			329b86aafc39bd7320ea7d1d35c87bc1de1 51e0b	,	
	Mult	ipart Description/PDF files in .	zip description		
	Document D	escription	Start	E	nd
	Transmitta	al Letter	1		3
	Information Disclosure Stat	ement (IDS) Form (SB08)	4		7
Warnings:					
Information:					
2	Non Patent Literature	6583-426 OA 08-15-2014.pdf	760166	no	19
	Non Patent Literature	6383-426_OA_08-13-2014.pul	92e718d5ae9f43744c9b135cd529cf243b80 207a		
Warnings:					
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3	Non Patent Literature	6583-428_OA_09-16-2014.pdf	650527	no	20
			2a8c75cc05d27efaa9867b8e95eb8d79962 5227a		
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4	Non Patent Literature	6583-431_OA_09-11-2014.pdf	332841	no	10
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5	Non Patent Literature	6583-432_OA_10-23-2014.pdf	650281	no	20
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6	Non Patent Literature 6583-433 OA 10-23-	6583-433_OA_10-23-2014.pdf	505168	no	16
			9580d4d4b6644bb5e83af4d774ee349c011 04e6f		
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7	Non Patent Literature	6583-434_OA_10-21-2014.pdf	786732	no	22
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8	Non Patent Literature	6583-435_OA_10-02-2014.pdf	726776 075ce65886272c8538333ce71c148a18ed29 a2e56	no	21
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9	Non Patent Literature	6583-436 OA 09-04-2014.pdf	409918	no	14
	North delit Erterature	0303 130_0/_03 01 2011.pull	0587ac5de8a03e52acb8dabfd88b9f23088 e7e1e	110	
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Information:					
10	Non Patent Literature	6583-437_OA_09-02-2014.pdf	418309	no	14
			4fd2175e3fdb93d51d00ab528332d895011 9dabe		
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11	Non Patent Literature	6583-439_OA_10-09-2014.pdf	456496	no	15
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12	Non Patent Literature	6583-440_OA_09-30-2014.pdf	804315	no	24
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13	Non Patent Literature	6583-441_OA_10-07-2014.pdf	311743	no	10
			97fa18e8dd147a13bb0845fd65842a4eecf5 f60a		
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14	Non Patent Literature	6583-452_OA_11-10-2014.pdf	356998	no	11
			1c2fa4c9308de40d3e0fa83b414b3f66f2f06 96a		
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15	Non Patent Literature	6583-455_OA_09-11-2014.pdf	283036	no	10
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Information:					
16	16 Non Patent Literature 6583-457_OA_10-08-2014.pd	750825	no	21	
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Information:					

17	Non Patent Literature	6583-469_OA_08-19-2014.pdf	525045 d7ba8dcb7b0bc6a82eb32544cb87d6e025f	no	17
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Information:					
18	Non Patent Literature	6583-480_OA_10-02-2014.pdf	286848	no	9
			453b643b4af78dedab130e799e988d52a96 1a4bc		
Warnings:					
Information:					
19	Non Patent Literature	6583-489_OA_08-15-2014.pdf _	526932	no	15
			47188b1b81e600e195464d6413e071be32 aed7fc		
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Information:					
20	Non Patent Literature	6583-496_OA_08-12-2014.pdf	599682	no	19
			6032b3c8938d957d2db08dce715620b86f d462c1		
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21	Non Patent Literature	6583-498_OA_08-19-2014.pdf	467276	no	14
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22	Non Patent Literature	6583-499_OA_08-19-2014.pdf	428709	no	13
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23	Non Patent Literature	6583-504_OA_07-31-2014.pdf	289770	no	9
		·	5672e9bb8025b88a012f27c27e54100eb8f d3f87		
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Information:					
24	Non Patent Literature	6583-508 OA 08-29-2014.pdf	979764	no	30
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Warnings:					
Information:					
25	Non Patent Literature	6583-510_OA_11-07-2014.pdf	328862	no	10
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Warnings:					

26	Non Patent Literature	6583-511_OA_11-03-2014.pdf	465744	no	16
20	Non ratent Literature	'	766bec5e288e793404dd54a48256e5335e0 e84e2		10
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27	Non Patent Literature	6583-519_OA_08-22-2014.pdf	668117	no	20
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28	Fee Worksheet (SB06)	fee-info.pdf	30645	no	2
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## New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

## National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

## New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	) Group Art Unit: 2421
Sanjiv Sirpal	Confirmation No.: 7370
Serial No.: 13/968,665	) Examiner: James R. Marandi
Filed: August 16, 2013	) SUPPLEMENTAL
Atty. File No.: 6583-488	) INFORMATION DISCLOSURE
Entitled: "Panel User Interface for an Intelligent	) <u>STATEMENT</u>
Television"	) Electronically Submitted
Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	
Dear Commissioner:	
The references cited on attached Form PTO	/SB08 are being called to the attention of the
Examiner.	
☐ Copies of the cited non-patent and/or foreign	references are enclosed herewith.
Copies of the cited U.S. patents and/or patent	t applications are enclosed herewith.
Copies of the cited U.S. patents/patent a	pplication publications are not enclosed in
accordance with 37 C.F.R. § 1.98(a).	
•	sed, in accordance with 37 C.F.R. § 1.98(d),
because the references were cited by or submitted	to the U.S. Patent and Trademark Office in
prior application Serial No filed	, which is relied upon for an
earlier filing date under 35 U.S.C. § 120.	
To the best of applicants' belief, the perti	nence of the foreign-language references is
believed to be summarized in the attached Engli	sh abstracts and/or in the figures, although
applicants do not necessarily vouch for the accuracy	of the translation.
Examiner's attention is drawn to the following	ng related applications:
Serial No filed	(Attorney Ref. No)
Serial No filed	(Attorney Ref. No)
Other:	
Submission of the above information is not i	ntended as an admission that any item is
citable under the statutes or rules to support a rejecti	ion, that any item disclosed represents
analogous art, or that those skilled in the art would r	refer to or recognize the pertinence of any
reference without the benefit of hindsight, nor shoul	d an inference be drawn as to the pertinence

of the references based on the order in which they are presented. Submission of this statement should not be taken as an indication that a search has been conducted, or that no better art exists.

It is respectfully requested that the cited information be expressly considered during the prosecution of this application and the references made of record therein.

# **FEES**

37 CFR 1.97(b): No fee is believed due in connection with this submission, because the information disclosure statement submitted herewith is satisfied by one of the following conditions ("X" indicates satisfaction):				
Within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d), or				
Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application, or				
Before the mailing date of a first Office Action on the merits, or				
Before the mailing of a first Office action after the filing of a request for continued examination under 37 CFR 1.114.				
Although no fee is believed due, if any fee is deemed due in connection with this submission, please charge such fee to Deposit Account 19-1970.				
37 CFR 1.97(c): The information disclosure statement transmitted herewith is being filed after all the above conditions (37 CFR 1.97(b)), but before the mailing date of any one of the following conditions:  (1) a final action under 37 C.F.R. 1.113, or (2) a notice of allowance under 37 C.F.R. 1.311, or (3) an action that otherwise closes prosecution in the application.  This Information Disclosure Statement is accompanied by:  A Certification (below) as specified by 37 C.F.R. 1.97(e). Although no fee is believed due, if any fee is deemed due in connection with this submission, please charge such fee to Deposit Account 19-1970.  OR  Please charge Deposit Account 19-1970 in the amount of \$180.00 for the fee set forth in 37 C.F.R. 1.17(p) for submission of an information disclosure statement. Please credit any overpayment or charge any underpayment to Deposit Account 19-1970.				
This information Disclosure Statement is being submitted after the period specified in 37 CFR 1.97(c).  This information Disclosure Statement includes a Certification (below) as specified by 37 C.F.R. 1.97(e)  AND  Applicants hereby requests consideration of the reference(s) disclosed herein. Please charge Deposit Account 19-1970 in the amount of \$180.00 under 37 C.F.R. 1.17(p). Please credit any overpayment or charge any underpayment to Deposit Account 19-1970. Election to pay the fee should not be taken as an indication that applicant(s) cannot execute a certification.				

		tion (37 C.F.R. 1.97(e)) cable only if checked)
	submitted herewith was fir in a counterpart foreign ap this statement. 37 C.F.R. 1	ation contained in the Information Disclosure Statements of cited in any communication from a foreign patent office opplication not more than three months prior to the filing of .97(e)(1).  communication from the foreign patent office is enclosed.
		OR
	submitted herewith was cit counterpart foreign applica making reasonable inquiry. Disclosure Statement was l	n contained in the Information Disclosure Statement ed in a communication from a foreign patent office in a ation, and, to the knowledge of the undersigned after, no item of information contained in the Information known to any individual designated in 37 C.F.R. 1.56(c) for to the filing of this statement. 37 C.F.R. 1.97(e)(2).
		Respectfully submitted,
		SHERIDAN ROSS P.C.
Date:_	November 13, 2014	By: /Douglas W. Swartz/ Douglas W. Swartz Registration No. 37,739 1560 Broadway, Suite 1200 Denver, Colorado 80202-5141 (303) 863-9700



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/968,665	08/16/2013	Sanjiv Sirpal	6583-488	7370
111285 7590 10/09/2014 Sheridan Ross P.C.			EXAMINER	
1560 Broadway			MARANDI, JAMES R	
Suite 1200 Denver, CO 80	202		ART UNIT	PAPER NUMBER
			2421	
			NOTIFICATION DATE	DELIVERY MODE
			10/09/2014	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com edocket@sheridanross.com

	Application No.	Applicant(s)				
	13/968,665	SIRPAL ET A				
Office Action Summary	<b>Examiner</b> James R. Marandi	Art Unit 2421	AIA (First Inventor to File) Status Yes			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orresponden	ce address			
A SHORTENED STATUTORY PERIOD FOR REPLY THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed the mailing date of D (35 U.S.C. § 133	f this communication.			
Status						
3) An election was made by the applicant in response	<b>30(b)</b> was/were filed on action is non-final. onse to a restriction requirement		ng the interview on			
<ul> <li>; the restriction requirement and election</li> <li>Since this application is in condition for allowar closed in accordance with the practice under E</li> </ul>	nce except for formal matters, pro	secution as t	to the merits is			
Disposition of Claims*  5)  Claim(s) 1-20 is/are pending in the application. 5a) Of the above claim(s) is/are withdraw 6)  Claim(s) is/are allowed. 7)  Claim(s) 1-20 is/are rejected. 8)  Claim(s) is/are objected to. 9)  Claim(s) are subject to restriction and/o * If any claims have been determined allowable, you may be el participating intellectual property office for the corresponding an <a href="http://www.uspto.gov/patents/init_events/pph/index.jsp">http://www.uspto.gov/patents/init_events/pph/index.jsp</a> or send  Application Papers  10)  The specification is objected to by the Examine 11)  The drawing(s) filed on 08/16/2013 is/are: a)  Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct	wn from consideration.  r election requirement. igible to benefit from the Patent Pros pplication. For more information, plea an inquiry to PPHfeedback@uspto.c  r.  daccepted or b) □ objected to by drawing(s) be held in abeyance. See	ase see  alov.  the Examine and 37 CFR 1.85(	er. (a).			
Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  Certified copies:  a) All b) Some** c) None of the:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No.  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  ** See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  2) ☑ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SPaper No(s)/Mail Date	3) Interview Summary Paper No(s)/Mail Da 4) Other:					

U.S. Patent and Trademark Office PTOL-326 (Rev. 11-13)

Art Unit: 2421

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

#### **DETAILED ACTION**

#### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

- 2. Claims 1-20 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Rhoads et al., USPGPUB 2012/0174039 (hereinafter "Rhoads").
  - **2.1.** Regarding claim 1, Rhoads discloses a method for displaying content on a television (Abstract, Figs. 1, 3, 11, and navigational sequence as detailed in Figs. 5-8), comprising:

receiving a first directional input (Fig. 5, 508, navigating/ selecting from list 502; ¶¶ [87]-[90]) via an input device (Fig. 3, 310, ¶ [53]) associated with the television (User device 300, as further detailed in Fig. 4, ¶ [66]);

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determining, based on a first direction associated with the first directional input (selection/ highlighted region 506), a content panel (504, ¶ [89]) to display via the television;

retrieving, from a memory (as shown in Fig. 3, control circuitry 304 comprising processing circuitry 306 retrieves information from memory 308, ¶¶ [[49], [51]), a first content information (e.g. "Featured") for displaying in the content panel (502, ¶ [89]);

identifying at least one of a content source (as highlighted by arrows 522, and region 526; "Featured" content from sourced from DIVX TV/ Internet Video) and a second content information (e.g. "AOL Autos") currently being displayed via the television (512, 514, ¶¶ [92]-[93]);

selecting a panel type (510) based on the identified at least one of content source and second content information currently being displayed via the television (¶¶ [92]-[93]);

retrieving, from memory, a third content information (e.g.

TRANSLOGIC) based on the selected panel type (¶¶ [92]-[96]); and

displaying, via the television, the retrieved first content information and the third content information in the content panel based on the selected panel type (as displayed in Fig. 5, and described above; ¶¶ [92]-[96]).

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2.1.1. Regarding claim 2, Rhoads discloses:

retrieving, from a memory (as analyzed for claim 1), a first image (as displayed in 512) that is representative of the at least one of content source and second content information (shown in region 526, and indicated via arrows 522, 524); and

displaying, via the television, the first image in the content panel ( $\P$  [92], [97]).

- 2.1.2. Regarding claim 3, Rhoads discloses wherein the content panel is an **application panel** (e.g. "Search" option in panel 502).
- 2.1.3. Regarding claim 4, Rhoads discloses:

receiving a second directional input via the input device (As further highlighted and detailed in Fig. 6, user may also choose a second directional input 508 of panel 504, such as highlighted by 506, ¶ [110]); and

determining, based on a second direction associated with the second directional input, a second content panel (panel 510, comprising content information 604) to display via the television (display 600, ¶ [110]).

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2.1.4. Regarding claim 5, Rhoads discloses:

receiving a second directional input via the input device (as analyzed in claim 4 with respect to 504, 508, and highlighted region 506);

determining, based on a second direction associated with the second directional input, a source of at least one content information to be displayed in the content panel based on the selected panel type (as shown in area 606);

retrieving at least a portion of the at least one content

information from the determined source (e.g. as shown in 606); and

displaying, via the television, the content information associated with
the determined source (606, ¶ [110]).

- 2.1.5. Regarding claim 6, Rhoads discloses wherein the third content information comprises information associated with **content information marked as**favorite (As shown in Fig. 5, user may select "My Favorites" to be able to select from list of favorite content; See ¶¶ [43], [70])).
- 2.1.6. Regarding claim 7, Rhoads discloses wherein the third content information comprises information associated with **TV series episode** content information (As shown in Fig. 5, content is associated with AOL series episodes of TRANSLOGIC 6.x).

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- 2.1.7. Regarding claim 8, Rhoads discloses wherein the selected panel type is a search panel (Fig. 5, option "Search" from list 502).
- 2.1.8. Regarding claim 9, Rhoads discloses wherein the selected panel type is a recommended panel (¶ [43]).
- 2.2. Computer program code of claim 10 effectuating the method of claim 1 is rejected by the same analysis.
  - 2.2.1. Computer program code of claim 11 effectuating the method of claim 2 is rejected by the same analysis.
  - 2.2.2. Computer program code of claim 12 effectuating the method of claim 3 is rejected by the same analysis.
  - 2.2.3. Computer program code of claim 13 effectuating the method of claim 6 is rejected by the same analysis.
  - 2.2.4. Computer program code of claim 14 effectuating the method of claim 5 is rejected by the same analysis.

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2.2.5. Computer program code of claim 15 effectuating the method of claim 7 is rejected by the same analysis.

2.3. Regarding claim 16, Rhoads discloses a system for displaying content on a television (Abstract, Figs. 1, 3, 11, and navigational sequence as detailed in Figs. 5-8), comprising:

an input device (Fig. 3, 310,  $\P$  [53]) associated with the television; (User device 300, as further detailed in Fig. 4,  $\P$  [66]);

a memory (308,  $\P\P$  [[49], [51]); and

a microprocessor (Fig. 3, 306) operable to:

receive a first directional input (Fig. 5, 508, navigating/ selecting from list 502;  $\P$  [87]-[90]) via an input device (Fig. 3, 310,  $\P$  [53]) associated with the television (User device 300, as further detailed in Fig. 4,  $\P$  [66]);

determine, based on a first direction associated with the first directional input (selection/ highlighted region 506), a content panel (504, ¶ [89]) to display via the television;

retrieving, from a memory (as shown in Fig. 3, control circuitry 304 comprising processor 306 retrieving information from memory 308, ¶¶ [[49], [51]), a first content information (e.g. "Featured") for displaying in the content panel (502, ¶ [89]);

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identifying at least one of a content source (as highlighted by arrows 522, and region 526; "Featured" content from sourced from DIVX TV/ Internet Video) and a second content information (e.g. "AOL Autos") currently being displayed via the television (512, 514, ¶¶ [92]-[93]);

selecting a panel type (510) based on the identified at least one of content source and second content information currently being displayed via the television ( $\P$  [92]-[93]);

retrieving, from memory, a third content information (e.g. TRANSLOGIC) based on the selected panel type (¶¶ [92]-[96]); and displaying, via the television, the retrieved first content information and the third content information in the content panel based on the selected panel type (as displayed in Fig. 5, and described above; ¶¶ [92]-[96]).

2.3.1. Regarding claim 17, Rhoads discloses wherein the microprocessor is further operable to:

retrieve, from a memory (as analyzed for claim 1), a first image (as displayed in 512) that is representative of the at least one of content source and second content information (shown in region 526, and indicated via arrows 522, 524); and

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display, via the television, the first image in the content panel ( $\P$  [92], [97]).

- 2.3.2. Regarding claim 18, Rhoads discloses wherein the content panel is an application panel (e.g. "Search" option in panel 502).
- 2.3.3. Regarding claim 19, Rhoads discloses wherein the microprocessor is further operable to:

receive a second directional input via the input device (as analyzed in claim 4 with respect to 504, 508, and highlighted region 506);

determine, based on a second direction associated with the second directional input, a source of at least one content information to be displayed in the content panel based on the selected panel type (as shown in area 606);

retrieve at least a portion of the at least one content information from the determined source (e.g. as shown in 606); and

display, via the television, the content information associated with the determined source (606,  $\P$  [110]).

2.3.4. Regarding claim 20, Rhoads discloses wherein the third content information comprises information associated with **content information** marked as favorite (As shown in Fig. 5, user may select "My Favorites" to

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be able to select from list of favorite content; See  $\P$  [43], [70])).

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Marandi whose telephone number is (571)270-1843. The examiner can normally be reached on 8:00 AM- 5:00 PM M-F, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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APPLICANTS Flextronics AP. L										
INVENTORS Sanjiv Sirpal, Oa Mohammed Seli Saulo Correia Do	INVENTORS Sanjiv Sirpal, Oakville, CANADA; Mohammed Selim, Oakville, CANADA; Saulo Correia Dourado, Oakville, CANADA;									
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ADDRESS Sheridan Ross P.C. 1560 Broadway Suite 1200 Denver, CO 80202 UNITED STATES										
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Examiner Signature		/James Marar	ndi/		Date Considered	09/30/2014

S	Substitute for form 1449/PTO			Complete if Known	
				Application Number	13/968,665
l IN	FORMA <sup>*</sup>	TION DISC	CLOSURE	Filing Date	August 16, 2013
l s	ГАТЕМЕ	NT BY AP	PLICANT	First Named Inventor	Sanjiv Sirpal
	(Use as many sheets as necessary)			Art Unit	2421
				Examiner Name	James R Marandi
Sheet	6	of	11	Attorney Docket Number	6583-488

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Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-kind Code <sup>2 (if known)</sup>	Filing Date MM-DD-YYYY	Name of Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
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Examiner Signature	/James Marandi/	Date Considered	09/30/2014	

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Substitute for form 1449/PTO				Complete if Known		
				Application Number	13/968,665	
IN	FORMA <sup>-</sup>	TION DISC	CLOSURE	Filing Date	August 16, 2013	
S <sup>-</sup>	<b>TATEME</b>	NT BY AP	PLICANT	First Named Inventor	Sanjiv Sirpal	
(),				Art Unit	2421	
				Examiner Name	James R Marandi	
Sheet	7	of	11	Attorney Docket Number	6583-488	

		FOI	REIGN PATEN	T DOCUMENTS		
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document  Country Code <sup>3</sup> ; Number <sup>4</sup> ; Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
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Examiner Signature	/James Marandi/	Date Considered	09/30/2014
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Sı	ubstitute for forr	m 1449/PTO		Complete if Known		
				Application Number	13/968,665	
IN	FORMA <sup>*</sup>	TION DISC	CLOSURE	Filing Date	August 16, 2013	
S	<b>TATEME</b>	NT BY AP	PLICANT	First Named Inventor	Sanjiv Sirpal	
	(Use as many sheets as necessary)			Art Unit	2421	
				Examiner Name	James R Marandi	
Sheet	8	of	11	Attorney Docket Number	6583-488	

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	NON-PATENT LITERATURE DOCUMENTS					
Examiner Initials*	No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
/J.M./		TVONICSUK "Tvonics: How to use the EPG search function." 1 pages retrieved from the internet on Nov. 11, 2013 from [www.youtube.com/watch?v=H8euZ0lydo]				

Examiner Signature	/James Marandi/	Date Considered	09/30/2014
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				Application Number	13/968,665	
IN	FORMA <sup>*</sup>	TION DISC	CLOSURE	Filing Date	August 16, 2013	
S1	<b>CATEME</b>	NT BY AP	PLICANT	First Named Inventor	Sanjiv Sirpal	
(Use as many sheets as necessary)				Art Unit	2421	
				Examiner Name	James R Marandi	
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/J.M.	/ 241	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/36844, mailed Jun. 28, 2013 (Attorney's Ref. No. 6583-424-PCT) 8 pages
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***************************************	243	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/36826, mailed Jun. 17, 2013 (Attorney's Ref. No. 6583-430-PCT) 8 pages
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Examiner	/James Marandi/	Date	N0/20/201 <i>A</i>
Signature	/James Maranui/	Considered	03/30/2014

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Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE				Application Number	13/968,665
				Filing Date	August 16, 2013
STATEMENT BY APPLICANT (Use as many sheets as necessary)			PLICANT	First Named Inventor	Sanjiv Sirpal
			cessary)	Art Unit	2421
				Examiner Name	James R Marandi
Sheet 10 of 11		Attorney Docket Number	6583-488		

/J.M./	260	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2013/036804, mailed Jul. 01, 2013 (Attorney's Ref. No. 6583-472-PCT) 13 pages
0000000000	261	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55405, mailed Jan. 17, 2014 (Attorney's Ref. No. 6583-478-PCT) 8 pages
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Examiner	/James Marandi/	Date	09/30/2014
Signature		I Considered I	

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	(Use as m	any sheets as ne	cessary)	Art Unit	2421
				Examiner Name	James R Marandi
Sheet 11 of 11		Attorney Docket Number	6583-488		

/J.M./	279	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US13/55315, mailed Jan. 24, 2014 (Attorney's Ref. No. 6583-502-PCT) 9 pages
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Examiner	/James Marandi/	Date	I 09/30/2014 I
Signature	/Jailles Marallul/	Considered	03/00/2014

# Search Notes

Application/Control No.	Applicant(s)/Patent Under Reexamination
13968665	SIRPAL ET AL.
Examiner	Art Unit
JAMES R MARANDI	2421

CPC- SEARCHED				
Symbol	Date	Examiner		
H04N 1/00408; H04N 1/00419; H04N 1/00429; H04N 21/472; H04N	10/01/2014	JRM		
21/482; H04N 21/4825; G06F 3/048; G06F 17/30873				

CPC COMBINATION SETS - SEARCHED					
Symbol Date Examiner					

US CLASSIFICATION SEARCHED					
Class	Subclass	Date	Examiner		

SEARCH NOTES		
Search Notes	Date	Examiner
East (Inventorship double patenting; Keywords; Class/Subclass:	10/01/2014	JRM
725/37,38; 715/854,855; See search history)		

	INTERFERENCE SEARCH		
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

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#### **EAST Search History**

#### **EAST Search History (Prior Art)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	218	((Sanjiv) near2 (Sirpal)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2014/10/01 09:31
L3	65	((Mohammed) near2 (Selim)).INV.	US-PGPUB; USPAT; USOCR	OR ON		2014/10/01 09:33
L4	18	((Saulo) near2 (Dourado)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2014/10/01 09:33
L5	79	((Alexander) near2 ("de Paz")).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2014/10/01 09:33
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#### **EAST Search History (Interference)**

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Complete if Known Substitute for form 1449/PTO Application Number 13/968,665 INFORMATION DISCLOSURE Filing Date August 16, 2013 STATEMENT BY APPLICANT First Named Inventor Sanjiv Sirpal (Use as many sheets as necessary) Art Unit 2421 Examiner Name James R Marandi 5 Attorney Docket Number 6583-488 1 of Sheet

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	(Use as many sheets as necessary)			Art Unit	2421	
				Examiner Name	James R Marandi	
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l IN	FORMA <sup>*</sup>	TION DISC	CLOSURE	Filing Date	August 16, 2013	
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				Examiner Name	James R Marandi	
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				Application Number	13/968,665	
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S7	ГАТЕМЕ	NT BY AP	PLICANT	First Named Inventor	Sanjiv Sirpal	
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<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

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				Application Number	13/968,665	
l IN	FORMA <sup>-</sup>	TION DISC	CLOSURE	Filing Date	August 16, 2013	
S	ГАТЕМЕ	NT BY AP	PLICANT	First Named Inventor	Sanjiv Sirpal	
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				Examiner Name	James R Marandi	
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Index of Claims	13968665	SIRPAL ET AL.
	Examiner	Art Unit
	JAMES R MARANDI	2421

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				Examiner Name	James R Marandi	
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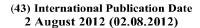
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

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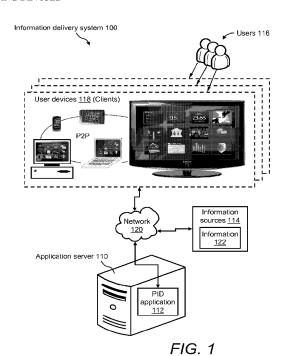
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(54) Title: INFORMATION DELIVERY SYSTEM FOR, AND METHODS OF, INTERACTION WITH MULTIPLE INFORMATION FORMS ACROSS MULTIPLE TYPES AND/OR BRANDS OF ELECTRONIC DEVICES, SUCH AS TELEVISIONS, MOBILE PHONES, AND COMPUTING DEVICES



(57) Abstract: An information delivery system for and methods of interaction with multiple information forms across multiple types, brands, and/or models of electronic devices, such as mobile devices, portable devices, desktop computers, and televisions is disclosed. The information delivery system for and methods of the invention provide the display of and access to secure user-centric information via the construct of a channel grid framework serving as a desktop on a user device. The channel grid framework includes multiple user-selectable items that provide access to corresponding "channels" by which respective portions of user-centric information are delivered to a user. The information delivery system of the invention may be suitable for consumer applications and/or enterprise applications. In one embodiment, the information delivery system of the invention supports a "Flex" presentation framework. In another embodiment, the information delivery system supports a "Web" presentation framework

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# INFORMATION DELIVERY SYSTEM FOR, AND METHODS OF, INTERACTION WITH MULTIPLE INFORMATION FORMS ACROSS MULTIPLE TYPES AND/OR BRANDS OF ELECTRONIC DEVICES, SUCH AS TELEVISIONS, MOBILE PHONES, AND COMPUTING DEVICES

#### CROSS-REFERENCES TO RELATED APPLICATIONS

[0001] This application claims priority to the following U.S. applications:

**[0002]** U.S. provisional application serial no. 61/435,976, filed January 25, 2011, entitled "Information Delivery System for, and Methods of, Interaction with Multiple Information Forms Across Multiple Types and/or Brands of Electronic Devices, such as Televisions, Mobile Phones, and Computing Devices;"

[0003] U.S. provisional application serial no. 61/474,942, filed April 13, 2011, entitled "Information Delivery System for, and Methods of, Eventing and Alerting Using Multiple Information Forms and Sources Across Multiple Types and/or Brands of Electronic Devices;"

[0004] U.S. provisional application serial number 61/476,961, filed April 19, 2011, entitled "Information Delivery System for, and Methods of, Interaction with Multiple Information Forms Across Multiple Types and/or Brands of Electronic Devices, such as Televisions, Mobile Phones, and Computing Devices;" and

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[0005] U.S. non-provisional application serial no. 13/273,894, filed October 14,
 2011, entitled "Methods, Apparatus and Systems for Presenting Television
 Programming and Related Information."

[0006] Each of the foregoing applications is incorporated herein by reference in its entirety.

#### **BACKGROUND**

[0007] Consumer and business users want to access digital information such as broadcast TV; internet text, graphics, and video; and social networking media across different devices. These devices include laptop computers, smart phones, TVs, and tablets and each device has its own interface, content metaphor, format, and access method. Users' experience with digital content over different devices is poor for two reasons: 1) the quality of the information delivery is varied and, 2) users are required

to learn how to use each device in order to receive their desired information. This learning process is time consuming and does not guarantee the users' success.

[0008] In addition, although certain technologies, such as Internet browsers and multimedia players, provide some centralized manner of accessing digital information, such technologies are largely static. As a result, these technologies cannot be customized for individual user preferences.

[0009] For example, in the broadcast TV environment, users select and receive information using traditional channel guides. With this technology, user interaction and information customization is extremely limited. The ability to combine broadcast TV content with other forms of information, such as social media, is restricted.

[0010] In other information areas such as healthcare, finance, and home security, users want to do more than just access information: users want to combine and interrogate information to produce more meaningful interactions with information and other users.

#### **SUMMARY**

[0011] Once embodiment of the disclosure relates to an apparatus to provide secure user-centric information via at least one user platform operated by a user. The apparatus includes at least one communication interface to facilitate wired and/or wireless communications with the at least one user platform via one or more transmission media and at least one memory to store processor-executable instructions. The apparatus further includes at least one processor communicatively coupled to the at least one communication interface and the at least one memory. Upon execution of the processor-executable instructions by the at least one processor, the at least one processor establishes a bidirectional, asynchronous user session to manage provision of and interaction with the secure user-centric information. The session is established by implementing a plurality of channels through which the user receives and/or interacts with, via the at least one user platform, respective portions of the secure user-centric information, controlling the at least one communication interface to receive, from the at least one user platform, a user identity for the user and a platform identity for the at least one user platform, and authenticating the user and the user platform to receive the secure user-centric information based at least in part

on the user identity and the platform identity. The session is further established by, if the user and the user platform are authenticated, controlling the at least one communication interface so as to cause the bidirectional, asynchronous user session to be established between the apparatus and a web browser of the at least one user platform and to transmit to the at least one user platform during the user session first authenticated channel information relating to at least one authorized channel of the plurality of channels, based at least in part on information access rights and/or security protocols respectively associated with the corresponding plurality of channels, the user, and the user platform. The processor is configured to control the at least one communication interface to cause the bidirectional, asynchronous user session to be established without requiring a separate application other than the web browser to be installed on the user platform to establish the user session.

[0012] Another embodiment relates to a method for providing secure user-centric information via at least one user platform operated by a user. The method includes implementing a plurality of channels through which the user receives and/or interacts with, via the at least one user platform, respective portions of the secure user-centric information, receiving, from the at least one user platform, a user identity for the user and a platform identity for the at least one user platform, and authenticating the user and the user platform to receive the secure user-centric information based at least in part on the user identity and the platform identity. The method further includes, if the user and the user platform are authenticated, causing a bidirectional, asynchronous user session to be established with a web browser of the at least one user platform and transmitting to the at least one user platform during the user session first authenticated channel information relating to at least one authorized channel of the plurality of channels, based at least in part on information access rights and/or security protocols respectively associated with the corresponding plurality of channels, the user, and the user platform. The bidirectional, asynchronous user session is established without requiring a separate application other than the web browser to be installed on the user platform to establish the user session.

[0013] Another embodiment relates to at least one computer readable storage medium storing processor-executable instructions that, when executed by at least one processor, perform a method for providing secure user-centric information via at least

one user platform operated by a user. The method includes implementing a plurality of channels through which the user receives and/or interacts with, via the at least one user platform, respective portions of the secure user-centric information, receiving, from the at least one user platform, a user identity for the user and a platform identity for the at least one user platform, and authenticating the user and the user platform to receive the secure user-centric information based at least in part on the user identity and the platform identity. The method further includes, if the user and the user platform are authenticated, causing a bidirectional, asynchronous user session to be established with a web browser of the at least one user platform and transmitting to the at least one user platform during the user session first authenticated channel information relating to at least one authorized channel of the plurality of channels, based at least in part on information access rights and/or security protocols respectively associated with the corresponding plurality of channels, the user, and the user platform. The bidirectional, asynchronous user session is established without requiring a separate application other than the web browser to be installed on the user platform to establish the user session.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0014] The skilled artisan will understand that the figures, described herein, are for illustration purposes only, and that the drawings are not intended to limit the scope of the disclosed teachings in any way. In some instances, various aspects or features may be shown exaggerated or enlarged to facilitate an understanding of the inventive concepts disclosed herein (the drawings are not necessarily to scale, emphasis instead being placed upon illustrating the principles of the teachings). In the drawings, like reference characters generally refer to like features, functionally similar and/or structurally similar elements throughout the various figures.

[0015] Figure 1 illustrates a high level block diagram of an example of an information delivery system that includes a personal information delivery application for interaction with multiple information forms across multiple types, brands, and/or models of electronic devices, according to the present invention;

[0016] Figure 2 illustrates a functional block diagram of an example of a channel of a personal information delivery application for providing users access to and interaction with information, according to the present invention;

[0017] Figure 3 illustrates a screenshot of an example of a client GUI of the personal information delivery application and shows an example of a channel grid, according to the present invention;

- [0018] Figure 4 illustrates various screenshots of certain components of an example of an "Around Me" channel of the personal information delivery application, according to the present invention;
- [0019] Figure 5 illustrates a functional block diagram of an example of a client runtime environment, which is the runtime environment of the user devices of the information delivery system, according to the present invention;
- **[0020]** Figure 6 illustrates a functional block diagram of an example of a personal information delivery application architecture for supporting the Flex presentation framework, according to the present invention;
- [0021] Figure 7 illustrates a functional block diagram of an example of a client architecture of the personal information delivery application, according to the present invention;
- [0022] Figure 8 illustrates a functional block diagram of an example of a communication flow between the client side and the server side of the personal information delivery application, according to the present invention;
- [0023] Figure 9 illustrates a functional block diagram of an example of a communication flow between components at the server side of the personal information delivery application, according to the present invention;
- [0024] Figure 10 illustrates a functional block diagram of a portion of the personal information delivery application architecture and a process of performing a user login operation, according to the present invention;
- [0025] Figure 11 illustrates a functional block diagram of a portion of the personal information delivery application architecture and a process of performing data management and eventing and alerting, according to the present invention;
- [0026] Figure 12 illustrates a screenshot of an example of the GUI of channel application catalog of the personal information delivery application by which users may acquire channels for use with their devices, according to the present invention;

[0027] Figure 13 illustrates a screenshot of an example of the client GUI that includes another example of a channel grid, according to the present invention;

- [0028] Figure 14 illustrates screenshots of certain components of an example of a "Stock Watch" channel of the personal information delivery application, according to the present invention;
- [0029] Figures 15 through 18 illustrate screenshots of a client GUI of the personal information delivery application and an example of a process of eventing and alerting using the personal information delivery application, according to the present invention:
- **[0030]** Figures 19 through 26 illustrate screenshots of certain channels of the personal information delivery application and an example of a process of combining two or more independent channels to create a new channel (and touchlet) and a process of eventing off of the combined data, according to the present invention;
- [0031] Figures 27 through 40 illustrate screenshots of an example of a "Television" channel of the personal information delivery application, according to the present invention;
- [0032] Figures 41 through 44 illustrate screenshots of certain components and operations of an example of a "Home Security" channel of the personal information delivery application and a process of alerting a user, according to the present invention;
- [0033] Figure 45 illustrates screenshots of certain components of an example of a "NetFlix" channel of the personal information delivery application, according to the present invention;
- [0034] Figures 46 and 47 illustrate screenshots of certain components of an example of a "Remote Healthcare" channel of the personal information delivery application, according to the present invention;
- [0035] Figure 48 illustrates screenshots of certain components of an example of a "My Medicine Cabinet" channel of the personal information delivery application, according to the present invention;

[0036] Figure 49 illustrates screenshots of certain components of an example of an "MS Word" channel of the personal information delivery application, according to the present invention;

- [0037] Figure 50 illustrates screenshots of certain components of an example of an "Email" channel of the personal information delivery application, according to the present invention;
- [0038] Figure 51 illustrates screenshots of certain components of an example of a "News Reader" channel of the personal information delivery application, according to the present invention;
- [0039] Figure 52 illustrates a screenshot of an example of an enterprise client GUI that includes an example of a login window, according to the present invention;
- [0040] Figures 53 and 54 illustrate screenshots of the enterprise client GUI showing two example channel grids that may be related to the enterprise, according to the present invention;
- [0041] Figure 55 illustrates screenshots of certain components of an example of a "Personal Calendar" channel that is suitable for use in enterprise applications, according to the present invention;
- [0042] Figure 56 illustrates screenshots of certain components of an example of a "myNet" channel that is suitable for use in enterprise applications, according to the present invention;
- [0043] Figure 57 illustrates screenshots of certain components of an example of a "Sales Pipeline" channel that is suitable for use in enterprise applications, according to the present invention;
- [0044] Figure 58 illustrates screenshots of certain components of an example of an "Open Room" channel that is suitable for use in enterprise applications, according to the present invention;
- [0045] Figures 59, 60, and 61 illustrate screenshots of certain components of an example of a "Security Threat Trends" channel that is suitable for use in enterprise applications, according to the present invention;

[0046] Figure 62 illustrates a block diagram of an example of an enterprise user hierarchy that shows individual users, roles assigned to users, and/or users assigned to groups within an enterprise, according to the present invention;

- [0047] Figure 63 illustrates a screenshot of an analyst client GUI that includes an example of a channel grid for users (i.e., analysts) in an analysts group of the enterprise, according to the present invention;
- [0048] Figure 64 illustrates a screenshot of a manager client GUI that includes an example of a channel grid for users (i.e., managers) in a managers group of the enterprise, according to the present invention;
- [0049] Figure 65 illustrates a screenshot of an example of a channel application catalog that includes content that corresponds to users (i.e., managers) in the managers group of the enterprise, according to the present invention;
- [0050] Figure 66 illustrates a screenshot of a director client GUI that includes an example of a channel grid for users (i.e., directors) in a directors group of the enterprise, according to the present invention;
- [0051] Figure 67 illustrates a screenshot of an example of a channel application catalog that includes content that corresponds to users (i.e., directors) in the directors group of the enterprise, according to the present invention;
- [0052] Figure 68 illustrates screenshots of certain components of an example of an "Alerts" channel that is suitable for use in enterprise applications, according to the present invention;
- [0053] Figure 69 illustrates screenshots of certain components of an example of a "Personnel Activity" channel that is suitable for use in enterprise applications, according to the present invention;
- [0054] Figure 70 illustrates screenshots of certain components of an example of a "Reports" channel that is suitable for use in enterprise applications, according to the present invention;
- [0055] Figure 71 illustrates screenshots of certain components of an example of a "User Administration" channel that is suitable for use in enterprise applications, according to the present invention;

[0056] Figure 72 illustrates screenshots of certain components of an example of a "Catalog Administration" channel that is suitable for use in enterprise applications, according to the present invention;

- **[0057]** Figure 73 illustrates a functional block diagram of an example of a personal information delivery application architecture for supporting a web presentation framework of the information delivery system, according to the present invention;
- **[0058]** Figure 74 illustrates a functional block diagram of an example of a client architecture of the personal information delivery application for supporting the web presentation framework, according to the present invention;
- [0059] Figure 75 illustrates a screenshot of an example of a web browser, which is running on a user device, for displaying a web page of a channel grid to the user, according to the present invention;
- **[0060]** Figure 76 illustrates a screenshot of the web browser displaying a web page of a "Home Security" channel that is operating in a substantially full-screen mode, according to the present invention;
- [0061] Figure 77 illustrates another screenshot of the web browser, which is running on a user device, for displaying a web page of another channel grid to the user, according to the present invention; and
- [0062] Figure 78 illustrates a screenshot of the web browser displaying a web page of a "Stock Watch" channel that is operating in a substantially full-screen mode, according to the present invention.
- [0063] It should be appreciated that all combinations of the foregoing concepts and additional concepts discussed in greater detail below (provided such concepts are not mutually inconsistent) are contemplated as being part of the inventive subject matter disclosed herein. It should also be appreciated that terminology explicitly employed herein that also may appear in any disclosure incorporated by reference should be accorded a meaning most consistent with the particular concepts disclosed herein.

#### **DETAILED DESCRIPTION**

[0064] Various embodiments of the present invention describe an information delivery system for, and methods of, interaction with multiple information forms across multiple types, brands, and/or models of electronic devices, such as mobile devices (e.g., cell phones), portable devices (e.g., tablets, laptop computers), desktop computers, and televisions (e.g., set top boxes, intelligent TVs). In one example, the invention provides a system for and methods of interfacing with televisions via a graphical user interface and secure receipt of information relating to television programming.

[0065] The information delivery system for and methods of the invention provide the display of and access to secure user-centric information via the construct of a channel grid framework serving as a desktop on a user device. The channel grid framework includes multiple user-selectable items that provide access to corresponding "channels" by which respective portions of user-centric information are delivered to a user. The user and the user device are first authenticated to receive the secure user-centric information, and the user-selectable items included in the channel grid framework on the desktop for the user device are based on information access rights and security protocols defined for the corresponding channels, the user, and the user device.

[0066] Referring to Figure 1, a high level block diagram of an example of an information delivery system 100 that includes a personal information delivery (PID) application 112 for interaction with multiple information forms across multiple types, brands, and/or models of electronic devices is presented. Information delivery system 100 may include an application server 110 upon which is installed the PID application 112 that has access to one or more information sources 114. One or more users 116 are associated with information delivery system 100. Users 116 may be, for example, individuals or groups of individuals. Each user 116 may have one or more user devices 118. Application server 110, the one or more information sources 114, and user devices 118 may be connected to a network 120 by any wired and/or wireless means. Network 120 may be, for example, any local area network (LAN) and/or wide area network (WAN) for connecting to the Internet.

[0067] Application server 110 may be a networked computer, such as the networked server of the owner and/or provider of PID application 112. The one or more information sources 114 may be, for example, networked computers of the owners and/or providers of the information stored thereon. For example, certain information 122 may be stored on information sources 114. Information 122 may be any information that can be delivered electronically over network 120 and that is capable of being consumed by users 116 via their user devices 118. More particularly, information 122 of the one or more information sources 114 may include different types and/or forms of information, data, and/or content. Examples of information 122 may include, but are not limited to, text, graphics, pictures, 3D graphic visualization of objects, sound, sensor data, streaming media data (e.g., streaming video and audio data), web-services data, Really Simple Syndication (RSS) feeds, image data, eventing and alerting, raw data, any type of information, and the like.

[0068] Information 122 of information sources 114 may be any information that resides outside of the application server 110 environment. However, with regard to information to be consumed by users 116 via their user devices 118, the invention is not limited to "external" information sources, such as information sources 114. Users 116 may also consume information from "internal" information sources (not shown), which are any information sources that reside directly at application server 110 and/or directly at user devices and/or from sensors contained on or communicating with user devices 118.

[0069] PID application 112 is a software application that facilitates user interaction with multiple information forms across multiple types, brands, and/or models of electronic devices (e.g., user devices 118). Generally, PID application 112 is operating under a client-server model of computing in which application server 110 is the server and each user device 118 is the client.

[0070] Preferably, user devices 118 have a runtime environment that includes, but is not limited to, the following attributes.

- 1. capability to access multiple different operating systems,
- 2. capability to access any information that is exposed at the device level,

3. capability to allow software and/or information updates without interrupting the device and/or service (i.e., "hot" updates),

- 4. capability to operate offline,
- 5. capability to maintain state information, and
- 6. any combinations thereof.

[0071] An example of such a runtime environment is the Adobe® AIR® 2.5 runtime (available from Adobe Systems Inc, San Jose, CA) and the HTML5 runtime. HTML5 is the next major revision of the HTML standard, which is currently under development.

## [0072] SYSTEM ARCHITECTURE SUPPORTING THE "FLEX" PRESENTATION FRAMEWORK

[0073] For the purpose of illustration, Figures 1 through 11 describe the system architecture of information delivery system 100 of the present invention implemented for supporting the Flex presentation framework. In one example, the Flex presentation framework may be implemented using Adobe® Flex® from Adobe Systems Incorporated (San Jose, CA). Adobe® Flex® is an open source framework for building highly interactive, expressive web applications that deploy consistently on all major browsers, desktops, and operating systems by leveraging the Adobe Flash Player and Adobe AIR® runtimes. In this example, user devices 118 (i.e., client devices) are any Adobe AIR-enabled devices. Examples of user devices 118 may include, but are not limited to, any type, brand, and/or model of Adobe AIR-enabled desktop computer; Adobe AIR-enabled laptop computer; Adobe AIR-enabled tablet computer; Adobe AIR-enabled net-book computing device; Adobe AIR-enabled handheld computing device; Adobe AIR-enabled personal digital assistant; Adobe AIR-enabled enterprise digital assistant; Adobe AIR-enabled portable digital assistant; Adobe AIR-enabled telecommunications device including one of an Adobe AIR-enabled telephone, Adobe AIR-enabled cell phone, and Adobe AIR-enabled smart phone; Adobe AIR-enabled personal navigation device; Adobe AIR-enabled vehicle-based device; Adobe AIR-enabled optical disk player; Adobe AIR-enabled television; Adobe AIR-enabled game console; and the like.

[0074] Therefore, an aspect of information delivery system 100 of the invention is that its operation is not limited to any particular type, brand, and/or model of client device and/or to any particular operating system (OS). That is, the operation of information delivery system 100 of the invention is substantially device-agnostic and/or OS-agnostic because it may operate, for example, on substantially any Adobe AIR-enabled client device. Additionally, information delivery system 100 of the invention is substantially information type-agnostic and/or information source-agnostic.

[0075] User devices 118 serve as a user platform operated by a user 116 to facilitate display of, and interaction with, secure user-centric information. Preferably, the set of user devices 118 belonging to each respective user 116 is connected in a peer-to-peer (P2P) fashion. In one example, the user devices 118 of a certain user 116 may include a mobile device (e.g., cell phone), a portable device (e.g., tablet, laptop computer), a desktop computer, and a television (e.g., set top box, intelligent TV). In this example, the user's cell phone, tablet, laptop computer, desktop computer, and television are connected (wired and/or wirelessly) in a P2P fashion.

[0076] PID application 112 of the invention provides a personalized information delivery utility that includes one or more sets of processor-executable instructions executing on one or more processors controlling various other hardware devices, with client-server system architecture, to facilitate delivery of a wide variety of information to a user, via one or more user devices or "platforms" (clients). Information is displayed on a graphical user interface (GUI) of a given user platform in a "presentation framework" that is customized based on a "user context." The presentation framework is homogenous amongst different user platforms so as to facilitate user familiarity and ease of interaction with displayed information. The presentation framework also facilitates the user's ability to take meaningful "real-time" action(s) in response to the displayed information.

[0077] The "user context" may be with respect to user attributes, such as, but not limited to, identity of the user, an identifier for one or more user devices associated with the user, location, activity, role, event, and any combinations thereof. Further, the "user context" may be with respect to user preferences, such as, but not limited to, source(s) of information of interest to the user, category/type of information of

interest to the user, priority and/or importance of information, time (of day, week, month, year) at which information is displayed, and any combinations thereof.

[0078] The mechanism of PID application 112 for providing the user access to and interaction with, for example, information 122 and/or any other information is referred to as a "channel." That is, the channel is a conduit for delivering information to a user (e.g., providing access to and interaction with information), and is an elemental feature (basic building-block) of PID application 112. With respect to the PID application 112, the channel two pieces (1) a visualization piece that is presented on the client device (e.g., user devices 118) and (2) the integration piece residing at the server (e.g., application server 110). More details of the channel with respect to PID application 112 are described with reference to Figures 2, 3, 4, and 5.

[0079] Referring to Figure 2, a functional block diagram of an example of a channel 200 of PID application 112 for providing users access to and interaction with information is presented. PID application 112 may provide at least one channel 200. Preferably, PID application 112 provides one or more function-specific channels 200. There may be a server portion of channel 200 that is resident at application server 110 and a client portion of channel 200 that is resident at each user device 118. The client side portion of channel 200 is for presenting and interacting with content. There is a server side portion of channel 200 provides services and that are always running. More details of the client architecture and server architecture underlying the client and server portions of any channel 200 are described with reference to Figures 5 through 11.

[0080] Any channel 200 of PID application 112 provides a gateway to content, such as information 122 of information sources 114. Additionally, each channel 200 has a built in eventing and alerting feature, which will be described in subsequent text. Each channel 200 may include a visual component 210 that is formed of a touchlet 212 and a channel application 214. Additionally, channel 200 may include one or more service components 216 and a configuration component 218.

[0081] Visual component 210 may be any text and/or graphic element that may be presented to users 116 for viewing on the display, screen, and/or GUI of any user device 118. With respect to a certain function-specific channel 200, the design and implementation of visual component 210 may be channel-specific. That is, visual

component 210 may be used to visually render at least some of the function-specific information on a GUI of a user device 118 via one or more text and/or graphic elements, and provide for interaction with the displayed channel information. The invention is not limited to presenting information to users 116 in a visual fashion only. Other ways (not shown) of conveying information to users 116 may be, for example, audible indicators (i.e., sound) and/or tactile indicators (e.g., vibration).

[0082] Channel application 214 may be any application software that is designed to perform singular and/or multiple related specific tasks and/or functions of a certain channel 200. Channel application 214 is used to manage the visual rendering of at least some of the channel-specific information on a GUI of a user device 118. Channel application 214 is also designed and used to manage user interaction with the displayed channel information.

[0083] Some channel applications 214 support implementation of the channel in a "full screen mode" on the GUI of a user device 118 once the channel 200 is deployed on the platform of PID application 112 and a channel 200 is invoked by a user (i.e., selected by the user to operate in substantially full-screen mode). A user invokes a certain channel 200 via its respective touchlet 212. Touchlet 212 includes a graphic element associated with its channel 200 that appears on a portion of the GUI of a user device 118, as part of the presentation framework, to provide a gateway/portal to its channel 200. A touchlet 212 has multiple behaviors as described with reference to Figure 3. Examples of function-specific channels 200 and their associated touchlets 212 are described with reference to Figure 3. Additionally, Figure 3 shows an example presentation framework of channels 200 on the GUI of a user device 118. More details of an example of a function-specific channel 200 with its visual components 210, touchlet 212, and channel application 214 are described with reference to Figure 4.

[0084] The one or more service components 216 of a channel 200 are used to access information from outside the environment of PID application 112. For example, service components 216 are used to retrieve the information 122 from the authorized information source(s) 114 and securely provide the retrieved information 122 to any visual components 210 of a channel 200 for display to user. Additionally, service components 216 may be used to monitor/process the channel information

(e.g., via event processing and/or complex event processing (CEP)) to derive "secondary" information (e.g., events–particular changes in state or content of channel information), and provide secondary information to any visual components 210 for conveying to the user (e.g., alerts).

[0085] Every channel 200 has at least one service that is invokes via service components 216. For example, one service is an identity service. The identity service may be used for (1) authenticating and authorizing users 116 to use a channel 200 and (2) authenticating channels 200 to invoke one or more services (at the server) in order to access content from, for example, authorized information source(s) 114. Every service has identity. The authorization and authentication is by channel, in this way authorization and authentication does not have to occur for each information request.

[0086] Configuration component 218 of any channel 200 includes information that defines the behaviors and "personality" of the channel 200. Configuration component 218 also includes user preferences. Further, the information in configuration component 218 defines the services being used, the data being used, alerts, user preferences for the content and alerts, state information, synchronization information, versioning information, and the like.

[0087] There are additional authorization aspects of each channel 200. For example, user authorization may be based on user identity, user role, user device, user/device location, time, date, day of week, and the like. For example, a certain user 116 is authorized to access certain content at his/her workplace location between 8am and 8pm, and only with his/her laptop computer that has a certain MAC address. At application server 110, configuration queries the identity subsystem (shown in Figure 6) to understand any user permissions. The user may be generally authorized to use a channel 200, but there may be conditions.

[0088] Because there is two pieces to each channel 200, the client side visualization piece and the server side integration piece, an aspect of the invention is that there is operational persistence at the server. Client devices may be shut down, but the channels are still operating on the server and services are still being run. As client devices become available, content will begin to stream.

[0089] A "presentation framework" is the manner in which information (generally multiple types or classes of information) is visually rendered (displayed to a user via a GUI of a user device 118) by PID application 112. The presentation framework is customized at least in part based on a user context (e.g., user attributes and/or preferences) and the presentation framework may sometimes purposefully constrain the scope and/or type of the information displayed on a GUI of a user device at any given time. The presentation framework thereby allows a user to interact with more limited information that may be particularly important to them in a given user context. This purposeful limitation on displayed information facilitates the user's ability to meaningfully absorb and respond to the information (e.g., take real-time action and/or make decisions in response to the displayed information).

[0090] PID application 112 provides a presentation framework that is homogenous amongst different user platforms so as to facilitate user familiarity and ease of interaction with available information; i.e., the presentation framework "follows a user around" from user device 118 to user device 118 and appears the same or substantially the same to the user on any GUI of any user device 118 on which the "client portion" of PID application 112 is installed.

[0091] A presentation framework includes one or more user-selectable items, or "touchlets" that are selectable by a user (e.g., via touch-screen and/or point and click, sound recognition, movement recognition or image recognition user interfaces) so as to invoke a "channel," through which one or more particular types of information are displayed to the user on the GUI of the user platform in a substantially full-screen mode. More details of one example of a presentation framework of PID application 112 are described with reference to Figure 3, as well as other Figures to follow.

**[0092]** Referring to Figure 3, a screenshot of an example of a client GUI 300 is presented that shows an example of a channel grid, which is one example of a presentation framework of PID application 112. Client GUI 300 may include, for example, a main viewing panel 310. Additionally, a taskbar 312 may be provided along the top of main viewing panel 310 and a navigation bar 314 may be provided along the bottom of main viewing panel 310.

[0093] Taskbar 312 may include, for example, standard calendar, time, window controls, and the like. Navigation bar 314 may include, for example, icons for

launching other applications, icons of other user devices 118, and the like. For example, navigation bar 314 may include a developer icon 320, a catalog icon 322, and certain device icons 326. The developer icon 320 may be used to launch a "developer environment" that may be built into the framework of PID application 112. The catalog icon 322 may be used to launch an "application store" by which users 116 may acquire (e.g., purchase) and then install and synchronize specific channels 200. Device icons 326 may depict any types, brands, and/or models of user devices 118 in the user's P2P network, such as a mobile phone, a tablet device, any computing device, a television, and the like.

[0094] Once acquired from the application store, the user's preferences may cause the acquired channel(s) 200 to automatically load and synchronize across all user devices 118. Alternatively, a user 116 may drag and drop any channel 200 (e.g., drag and drop its touchlet 316) from the current user device 118 to, for example, the telephone device icon 326, the tablet device icon 326, the television device icon 326, and so on. Thereby, installing and synchronizing or copying the channel 200 on another user device 118. Therefore, an aspect of the invention is that any channel on any user device can be quickly replicated and synchronized on any other user devices.

[0095] Client GUI 300 shows an example of a presentation framework that is organized into a grid for presenting channels 200 to a user 116 on any user device 118. In this example, multiple touchlets 316 are presented in a 3x4 channel grid 318 in the main viewing panel 310 of client GUI 300. For example, 3x4 channel grid 318 includes touchlets 316A through 316L. Each touchlet 316 in the 3x4 channel grid 318 of client GUI 300 represents a channel 200 of a specific purpose and/or function. User 116 may have multiple channel grids of information, which are accessible via the navigation bar 314. For example, navigation bar 314 may include certain channel grid icons 324, which are icons of other channel grids of the user. In one example, channel grid icons 324 may include an "At Home" channel grid icon, a "My TV" channel grid icon, and an "At Work" channel grid icon. A user 116 may specify a certain default channel grid in his/her profile. Additionally, as defined in the user's profile, the default channel grid may change based upon, for example, device type, time, location, prior activities, and the like. Further, user 116 may be presented an option of several different channel girds from which to select. In one example, the

channel grid 318 shown in main viewing panel 310 of client GUI 300 of Figure 3 may be the user's "At Work" channel grid.

**[0096]** Presentation of channel grids may change based upon user context or preferences. Generally, PID application 112 is capable to combine, screen, and/or synthesize information in any way to present information in an intelligent manner to the user. The invention is not limited to presenting content in a 3x4 or any other n x n channel grid. Other presentation styles are possible. For example, the touchlets of channels may be presented in a tiled fashion on a 3D cube, a tiled fashion on a 3D globe, a stacked tiled fashion, and the like.

[0097] Each touchlet 316 in the 3x4 channel grid 318 of client GUI 300 represents a channel 200 of a specific purpose and/or function. In one example, channel grid 318 includes a "News Reader" touchlet 316A, a "Stock Watch" touchlet 316B, another "Stock Watch" touchlet 316C, a "Business CRM" touchlet 316D, a "Currency" touchlet 316E, a "Banking" touchlet 316F, a "Live News" touchlet 316G, a "Business Calendar" touchlet 316H, an "Email" touchlet 316I, a "Personal Calendar" touchlet 316J, a "Business Finance" touchlet 316K, and an "Around Me" touchlet 316L. Further to the example, more details of the "Around Me" touchlet 316L and its associated channel application are described with reference to Figure 4.

[0098] Each touchlet 316 of client GUI 300 is an example of a touchlet 212 of channel 200 of Figure 2. Additionally, each touchlet 316 of client GUI 300 as well as the 3x4 channel grid 318 itself are examples of visual components 210 of channel 200 of Figure 2.

[0099] A touchlet 212 of channel 200 of Figure 2, such as touchlets 316A through 316L of Figure 3, has multiple behaviors – (1) a touchlet 212 may serve as an icon to launch its associated channel application 214 to full screen mode, (2) a touchlet 212 may receive dynamically streaming data, such as audio and video data, sensor data, any web-services data, RSS feeds, eventing and alerting, raw data, any type of information, and the like. Data may be pushed to the channel 200 and its touchlet 212 in near real time, and (3) a touchlet 212 may serve as a viewer for presenting information dynamically in near real time.

[00100] Additionally, a touchlet 212 may include substantially all the functionality of a full channel application. The "touchlet information" typically is related to or derived from the channel information provided by the corresponding channel associated with the touchlet, so that when visually rendered, the touchlet information provides a more limited but nonetheless intuitive representation of the channel information. Therefore, an aspect of the invention is that the construct of a channel 200 includes two levels of presentation (1) information that is streaming and/or displayed at the touchlet level and (2) information that is streaming and/or displayed at the full screen level that is launched via the touchlet.

[00101] Unlike standard icons and windows that are static and have little or no built-in intelligence, touchlets 212 have both static and dynamic behaviors, as well as intelligence. For example, touchlets 212 can provide information in context (e.g., context based on certain relationships between different data sources, time of day, day of week, geographic location, devices, users, user's role, and the like). Therefore, an aspect of the invention is that touchlets may be designed to present only information that is most interesting and/or meaningful to the user, and with context. Another aspect of the invention is that touchlets provide mechanisms for taking action and/or making decisions on that information.

[00102] An aspect of the invention is that multiple touchlets in a channel grid may be displaying near real-time dynamic content to the user simultaneously. For example, the twelve touchlets 316 in 3x4 channel grid 318 of client GUI 300 may be displaying near real-time dynamic content simultaneously (e.g., 12 streaming videos) to the user 116. Again, the content presented in each touchlet is designed to present only what is important to the user without saturating the user with content he/she does not want or need.

[00103] Another purpose and/or function of a touchlet 212, such as touchlets 316A through 316L of Figure 3, is that a touchlet 212 is capable of visually presenting static and/or dynamic content to a user 116 in a small window, until such time that the user 116 launches the associated channel application 214 in full-screen mode. For example, in near real time, application server 110 is pushing dynamic information from any sources to one or more touchlets 316 in near real time.

[00104] For example, in near real time, application server 110 is pushing dynamic information from a news web-service to "News Reader" touchlet 316A, dynamic stock information to "Stock Watch" touchlet 316B and "Stock Watch" touchlet 316C, streaming video data to "Live News" touchlet 316G, and so on. Further to the example and referring to Figure 4, various screenshots of certain components of an example of an "Around Me" channel 400 of PID application 112 are presented.

[00105] Figure 4 shows the "Around Me" touchlet 316L, which is an example of a visual component 210 of a channel 200. The "Around Me" touchlet 316L displays a pin marker on a map to visually represent to the user that "Around Me" channel 400 may be a mapping application. When a user touches, clicks on, or otherwise selects the "Around Me" touchlet 316L of channel grid 318, the underlying "Around Me" channel application 214 is launched and renders a substantially full-screen GUI of the "Around Me" channel 400. The "Around Me" channel 400 then presents substantially more information to the user than shown in the "Around Me" touchlet 316L alone.

[00106] The substantially full-screen display of any channel application, such as an "Around Me" channel application 214, may include, for example, a main viewing panel 410. Additionally, a taskbar 412 may be provided along the top of main viewing panel 410 and a navigation bar 414 may be provided along the bottom of main viewing panel 410. Navigation bar 414 may include, for example, a set of minitouchlets 416, which are substantially the same as, for example, touchlets 316 of channel grid 318 of Figure 3 but presented in miniature form. A user may navigate directly to any channel application by selecting one of the mini-touchlets 416.

[00107] Main viewing panel 410 of "Around Me" channel 400 may include, for example, a visual mapping component 418 and a search component 420. The GUI itself, along with its visual mapping component 418 and search component 420 are all examples of visual components 210 of a channel 200. While contextually related to one another and able communicate to one another, the "Around Me" channel GUI and the "Around Me" touchlet 316L are two separate and distinct entities.

[00108] "Around Me" channel 400 first acquires geo-location information. In one example, current geo-location information is automatically acquired from a user device 118 (e.g., geo-location data of a cell phone). In another example, geo-location

information is acquired by the user 116 manually entering an address. Once the "Around Me" channel 400 has acquired the geo-location information, a map of the user's location is presented via the visual mapping component 418. Additionally, search component 420 may be used for locating places of interest (restaurants, gas station, hospital, ATM, theater, etc) near this location. If the user selects certain places of interest using search component 420, these places of interest are highlighted or otherwise indicated on the map. Further, if the user selects a particular place of interest, driving directions may be indicated on the map. The driving directions may be presented in text form, image form (e.g., displayed pictures and/or videos), and/or audible form (e.g., spoken directions).

[00109] In order to accomplish the aforementioned functionality, certain services may be associated with "Around Me" channel 400. For example, associated with "Around Me" channel 400 may be an IP location service component 422, a destination service component 424, and a speech service component 426. Additionally, the operation of "Around Me" channel 400 is an example of using intraclient interactions as well as client-server interactions. Any interaction with the components of "Around Me" channel 400 is passing messages through what may be termed a "GUI conversation."

[00110] For example, when the user 116 pushes a "Find Me" button on the GUI a message is passed (via the GUI conversation) to the IP location service component 422. The IP location service component 422 then communicates with its related server channel component at application server 110. For example, IP location service component 422 passes the IP address to the server and requests the corresponding geographic location information. The related server channel component queries a mapping service (e.g., Bing) and returns a location (e.g., Syracuse, NY) to the IP location service component 422. The IP location service component 422 passes this Syracuse, NY mapping data (via the GUI conversation) back to the visual mapping component 418 of the "Around Me" channel 400.

[00111] Similarly, when the user requests driving directions, a message is passed (via the GUI Conversation) to the destination service component 424. The destination service component 424 then communicates with its related server channel component at application server 110. The related server channel component queries a mapping

service (e.g., Bing) and returns turn-by-turn driving directions to the destination service component 424. The destination service component 424 passes the turn-by-turn driving directions data (via the GUI conversation) back to the visual mapping component 418 of the "Around Me" channel 400 and a driving route is indicated. Additionally, a text-to-speech conversion may be performed remotely at application server 110 and the results passed to speech service component 426 of the "Around Me" channel 400. The user then hears audible driving directions accordingly.

[00112] The "Around Me" channel 400 also illustrates the capability of performing updates without interrupting the device and/or service (i.e., "hot" updates). For example, the default visual mapping component 418 may be supported by the Bing Maps web-service. However, the visual mapping component 418 may include a selector that allows the user and/or developer to select from a list of map services, such as Google Maps, Yahoo Maps, MapQuest, and the like. If Google Maps is selected, the Google Maps data is automatically sent to the visual mapping component 418 with no client interaction. As a result, the visual mapping component 418 is updated with no device and/or service interruption.

[00113] Referring to Figure 5, a functional block diagram of an example of a client runtime environment 500 is presented, which is the runtime environment of user devices 118 of PID application 112. Client runtime environment 500 may include a cross-operating system application 510. In one example, when user devices 118 of PID application 112 are Adobe AIR-enabled devices, cross-operating system application 510 is based on Adobe® AIR®, which is described in Figure 1. Therefore, client runtime environment 500 of user devices 118 may take advantage of all the capabilities that come with Adobe AIR, such as, but not limited to, HTML, Flash, Adobe AIR APIs, messaging, and the like. For example, Flash allows access the Hulu website to play streaming videos and because Adobe AIR includes a web browser, it can run HTML. Further, the Adobe AIR runtime is suitable for use with many different operating systems. For example, the Adobe AIR runtime is suitable for use with desktop operating systems, such as Mac, Windows, and Linux; mobile operating systems, such as RIM, WebOS, Windows Phone7, Symbian, and Android; and TV-related operating systems, such as Internet Protocol Television (IPTV) operating systems.

[00114] Referring to Figure 6, a functional block diagram of an example of a PID application architecture 600 for supporting the Flex presentation framework is presented. PID application architecture 600 is an example of the application architecture of the server side of PID application 112. PID application architecture 600 may include a facilitation layer 610 through which all messaging of user devices 118 (the clients) pass, an integration and process layer 612, and an integrated services and applications layer 614.

[00115] Facilitation layer 610 further includes a facilitation server 616 and certain other servers 628. Generally, facilitation server 616 manages the communication between the client (e.g., user devices 118) and the server (e.g., application server 110). Facilitation server 616 serves as the gate keeper. In a sense, facilitation server 616 introduces the client to the integration and process server 646 and then goes away. Facilitation server 616 serves as the client representative to the rest of the server stack. In one example, facilitation server 616 is implemented using a Java server component that provides a set of real-time data management and messaging capabilities. One example of this Java server component may be Adobe® LiveCycle® Data Services.

**[00116]** Facilitation server 616 of the facilitation layer 610 may include, for example, a client gateway 618, proxy services 620, invocation services 622, interclient messaging/synchronization 624, and a facilitation processor 626.

[00117] Client gateway 618 may be the direct interface with the client (e.g., user devices 118) for handling messaging operations. In one example, client gateway 618 uses Action Message Format (AMF) and/or Java Message Service (JMS) for exchanging messages and/or data between the client and server and/or between one client and another client.

[00118] Servers 628 of the facilitation layer 610 may include, for example, a channel server 630, a content delivery server 632, a collaboration media server 634 (e.g., video conferencing server), a stream sync server 636, an analytics server 638, an advertising server 640, a transcoding server 642, and a media server 644.

[00119] Generally, channel server 630 is used for the creation and consumption of channels 200. Channel server 630 is not utilized in the operation of channels 200.

For example, channel server 630 may include a repository of channels 200, a channel application catalog 631, and a developer module 633. Channel application catalog 631 may be an "application store" of available channels 200 from which users 116 may acquire (e.g., purchase), download, and install and synchronize specific channels 200. An example of channel application catalog 631 is shown in Figure 12.

[00120] Developer module 633 may be the "developer environment" that may be built into the framework of PID application 112. For example, developer module 633 may be used by software developers to design specific channels 200. In one example, the developer icon 320 of client GUI 300 of Figure 3 may be used to launch the developer module 633. Therefore, an aspect of the invention is that PID application 112 provides a developer environment (e.g., developer module 633) in the same framework as the user environment and without having to exit the user environment.

[00121] Content delivery server 632 may be a server for storing and/or managing any other content that is not managed by, for example, collaboration media server 634, advertising server 640, and media server 644. Collaboration media server 634 is used to facilitate video conferencing. Stream sync server 636 is the server that integrates with advertising and analytics as it relates to the client and content that is being presented. An example of using stream sync server 636 is synchronizing and/or relating ads on one user device 118 (e.g., TV) with ads on another user device 118 (e.g., tablet). Analytics server 638 is used to configure and administer analytics applications. Advertising server 640 may be a dedicated server for storing and/or managing advertising content. Media server 644 may be a dedicated server for storing and/or managing various digital media, such as digital videos/movies, audio/music, and picture files.

[00122] Transcoding server 642 may be a dedicated server for performing transcoding operations. Transcoding is the ability to adapt digital files so that content can be viewed on different playback devices. Working like an interpreter, a transcoder translates files to a suitable format for the end user. Transcoding servers (e.g., transcoding server 642) and services reformat material that would otherwise have to be developed separately for different platforms. Transcoding servers and services are commonly used for adapting content for mobile devices or serving video.

[00123] Integration and process layer 612 may be organized in a standard service-oriented architecture (SOA). Integration and process layer 612 further includes an integration and process server 646 along with certain hosting applications 674, hosted communications applications 676, and integral identity provider SSO provider 678. Integration and process server 646 of integration and process layer 612 further includes certain platform service components 648 and certain server channel components 662.

[00124] Platform service components 648 may include, but are not limited to, a data management subsystem 650, an eventing and alerting subsystem 652, a configuration server 654, a session manager 656, an administration subsystem 658, and an identity subsystem 660.

[00125] Data management subsystem 650 performs the master data management operations of PID application architecture 600. Master data management may include, for example, correlating user ID (which user are you?) to content and/or correlating user devices (user has 6 phones, which phone are you?) to content. Associated with data management subsystem 650 may be an operational data store (ODS) (not shown) and/or a data warehouse (not shown) for storing temporary data or long term data. The ODS may serve two purposes (1) the ODS is used to store data for historical purposes, because data may not persist or be stored at the source. For example, a channel 200 may poll a service every few minutes and store the data in the ODS; and (2) the ODS is used in general application usage. For example, there is a background process of any channel 200 of PID application 112 that is retrieving data and pushing it to the ODS. Therefore, any data that is presented to the user at the user device 118 (i.e., at the client device) may be supplied by the ODS. This ensures good response time for the end-user because the network will not have to be continually interrogated for information.

[00126] Eventing and alerting subsystem 652 is used to collect and/or analyze information from any one or more disparate data sources with respect to certain predetermined or dynamic event conditions. Example of types of information that may be evaluated/monitored by eventing and alerting subsystem 652 may include, but are not limited to, text information, graphic information, one or more pictures, one or more videos, audio or digital sound, streaming data, audio or video, content associated

with an executing computer application, voice-over-IP communication, instant messaging/SMS information, video-conferencing information, environmental monitoring information, financial services information, enterprise resource planning information, enterprise content management information, building information, project management information, product lifecycle management information, RSS reader information, remote device control/interaction information, a three-dimensional graphic visualization of one or more objects and/or immersive environments, one or more word processing documents, one or more spreadsheets, one or more presentation/slide shows, email, address book information, and any combinations thereof. CEP systems may also be utilized to evaluate/monitor event conditions.

[00127] Upon detecting the presence of an event condition, eventing and alerting subsystem 652 transmits alert notifications to users 116 via one or more user devices 118. Eventing and alerting subsystem 652 may include, for example, an event manager component, a notification manager, and a complex event processor. Further, events maybe stored for delivery at a later time or for use in a CEP system.

[00128] Once an event is registered in the event manager of the eventing and alerting subsystem 652, the event manager uses CEP (e.g., via complex query language (CQL) programming) to continually monitor the ODS of data management subsystem 650 based on event(s) that have been set and/or to perform a direct query of any external system and/or service.

[00129] Once the event manager recognizes that a certain event condition is present, the notification manager checks the user's configuration, which is at configuration server 654, as well as the user's session information at session manager 656 in order to determine how best to notify the end-user. Then, the alert notification is pushed through the client gateway 618 of the facilitation server 616 (e.g., via AMF) and to one or user devices 118 (client devices). As a result, the one or user devices 118 receive the alert notification and the alert presented to the user 116 via one or user devices 118.

[00130] Example of types of alerts that may be generated by eventing and alerting subsystem 652 may include, but are not limited to, visual alerts, auditory alerts, tactile

alerts, email messages, SMS text messages, activation of at least one channel of a plurality of channels, and notifications to a law enforcement agency.

[00131] A main aspect of a channel 200 is that eventing and alerting subsystem 652 provides actionable eventing and alerting capability to the user 116. That is, channels 200 of PID application 112 provide users the ability to take action upon receiving an alert, in which the mechanism for user response to an alert may be conveniently built into the channel itself.

[00132] Configuration server 654 manages device configurations, user profiles, data configurations, application configurations, and the like. Configuration server 654 is the counterpart to configuration component 218 of any channel 200.

[00133] Session manager 656 performs session management and/or handles state. Session manager 656 may include, for example, a session module and a policy module. In one example of managing state, a user 116 is watching TV (one user device 118) and decides to pause the TV show and resume watching the TV show on his/her laptop computer (another user device 118). Session manager 656 stores state information and communicates this state information between user devices 118 so that the user 116 can resume watching the TV show at his/her laptop computer from the same point in the broadcast.

[00134] Administration subsystem 658 is used to perform standard system administration tasks. For example, when a channel 200 is accepted into the channel application catalog 631, the administration subsystem 658 associates what users 116 are allowed to access the channel. With respect to authorizations, channels are assigned to groups and users. For example, anyone working in the accounting department of a company has access to a certain channel or only a certain user's family members are allowed access to a certain channel.

[00135] Identity subsystem 660 manages the authorization of users, places, times, and things. Identity subsystem 660 may include, for example, an authorize module and an authorized module. For example, users must be authorized for content and services must be authorized for content. Accordingly, services check to ensure that users are authorized to access their services.

[00136] A main aspect of PID application 112 of the invention is single sign-on (or universal sign-on) capability, wherein once the user 116 is activated on the system, the user 116 is automatically authenticated when accessing any applications that normally require user login, i.e., unified access to all applications. That is, once the user 116 logs into information delivery system 100, the user will not be prompted for any other login operations when accessing information and/or services via PID application 112. For example, the user 116 may have one or more secure email services, one or more secure banking and/or financial accounts, one or more secure web-services accounts, and the like. Login information of all the user's secure accounts is stored, for example, identity subsystem 660. When a user access these secure accounts, identity subsystem 660 automatically provides the necessary login credentials to the requesting entity, thereby automatically logging in the user with no further action on the user's part. Because multiple user devices 118 may be associated with a user 116, PID application 112 requires that the user 116 login on each of his/her user devices 118 as they become available in order to ensure the identity of the user 116.

[00137] In a location-based example, a user 116 is authorized to use a certain user device 118 and/or service only when inside his/her place of business. Therefore, upon leaving the building the authorization is revoked. In a time-based example, a user 116 is authorized to use a certain user device 118 and/or service only at a certain time of day, perhaps during off-peak hours. Therefore, during off-peak hours the authorization is allowed, but during peak hours the authorization is revoked.

[00138] Generally, server channel components 662 are used to perform the integration. Server channel components 662 may include Java-based components, such as, but not limited to, a Camel server channel component 664, a Spring server channel component 666, a Java server channel component 668, a JavaScript server channel component 670, a business process execution language (BPEL) server channel component 672.

[00139] Camel server channel component 664 may be, for example, the Apache Camel server channel component (available from The Apache Software Foundation). Camel server channel component 664 is used for the orchestration and integration of services. Spring server channel component 666 is used for implementing Inversion of

Control (IoC) and aspect-oriented programming (AOP). For example, when passing information from one component to another, the components involved have placeholders for data to be injected (or inserted). Spring server channel component 666 is used to manage this process. Java server channel component 668 may be implemented via (e.g., Java 2 Platform Standard Edition (J2SE)). JavaScript server channel component 670 is used for running JavaScript on the server side of PID application 112. BPEL server channel component 672 is used to export and import information by using web service interfaces.

**[00140]** With respect to integration and process layer 612, certain unique tasks are possible, independent of the source of the content. For example, sensor data and streaming media data are being normalized, which allows the capability to combine content. Therefore, a main aspect of the invention is that PID application 112 is agnostic to the source of the content and agnostic to the user device on which it is presented. From a client perspective, PID application 112 is agnostic to what content sources are connected.

[00141] The components of PID application architecture 600 communicate via an enterprise service bus 680 of integration and process server 646. Enterprise service bus 680 manages "calls" in and out of the PID application architecture 600. A set of adaptors 682 are connected to enterprise service bus 680 for interfacing with entities of integrated services and applications layer 614, which are outside of the environment of application server 110. That is, adaptors 682 are connected to enterprise service bus 680 for handling various communication protocols.

[00142] Integrated services and applications layer 614 may include, but is not limited to, one or more third-party services 684, one or more relational database management systems (RDBMS) 686, Parlay X 688 (i.e., a set of standard Web service APIs for the telephone network), one or more IP multimedia subsystem (IMS) servers 690, basic wireline telecommunication 692, one or more communications modules 694 (e.g., instant message, calendar, mail/SMS, address book), and one or more directory servers 696, which may be examples of information sources 114.

[00143] An aspect of the invention is that PID application 112 provides built in security at the application server 110, which inherently provides security at each user device 118. Any applications running in the PID application 112 environment are

checked for viruses, spyware, and the like. In this way, it is ensure that users 116 are operating in a secure environment.

[00144] Referring to Figure 7, a functional block diagram of an example of client architecture 700 of PID application 112 for supporting the Flex presentation framework is presented. Client architecture 700 is an example of the application architecture of the client side of PID application 112. That is, client architecture 700 is the application architecture of any user device 118.

**[00145]** Figure 7 shows a channel 200, which includes visual component 210, touchlet 212, channel application 214, and service component 216. Associated with a channel 200 are certain sub-components, such as assets 710, code 712, models 714, conversations 716, as well as configuration 718.

[00146] Assets 710 may be, for example, images, descriptive language for the layout of the channel, and the like. Code 712 is the actual programming code for the channel 200. A channel service 720 on the client side communicates with the channel server 630 on the server side. Code 712 interacts with channel service 720 in the client. Additionally, code 712 is cached in client cache 750 and then transmitted via a client bus 760 to identity subsystem 660 (performing authentication and authorization) and then to channel server 630. Any channels 200 that are installed on a user device 118 originate from channel server 630 (e.g., from channel application catalog 631).

[00147] Models 714 may be the data models for the channel 200. A model system 730 on the client side may include user-defined models, persistent models, synchronized persistent models, synchronized models, and the like. Associated with model system 730 may be a persistence service 732 and a synchronization service 734. Models 714 interact with persistence service 732 and synchronization service 734 in the client. Persistence service 732 on the client side communicates with the data management subsystem 650 on the server side. Synchronization service 734 on the client side communicates with the inter-client messaging/synchronization 624 on the server side. Additionally, models 714 are cached in client cache 750 and then transmitted via client bus 760 to identity subsystem 660 (performing authentication and authorization) and then to inter-client messaging/synchronization 624.

[00148] Conversations 716 may be any communication over the bus between client components and/or server components. Conversations 716 on the client side are transmitted via client bus 760 to the eventing and alerting subsystem 652 on the server side.

[00149] Configuration 718 may define, for example, the position of the touchlet on the channel grid, that the channel now monitoring a certain data stream, the user is receiving data and needs to be synchronized, the user has multiple devices that need to be synchronized, when any application is installed perform synchronization, location, ID, the channel is a synchronizable channel, the channel is an alertable channel, and the like. Configuration 718 includes any channel attributes that convey the "personality" or functionality of the channel. Certain information in configuration 718 may be selected by the user.

**[00150]** A configuration service 740 on the client side communicates with the configuration server 654 on the server side. Configuration 718 interacts with configuration service 740 in the client. Additionally, configuration 718 is transmitted via client bus 760 to identity subsystem 660 (performing authentication and authorization) and then to configuration server 654.

[00151] Client architecture 700 of the client side of PID application 112 is architected similar to an SOA for an enterprise stack. The client services use the idea of GUI conversations to exchange messages between client components and/or server components, all using the client bus and/or server bus. Therefore, an aspect of the invention is a sophisticated client architecture, similar to an SOA, that allows complex processing to occur locally at the client as well as at the server (yet without relying on the server), thereby enabling a rich user experience. Additionally, with respect to PID application architecture 600 and/or client architecture 700, more details of examples of certain process flows are described with reference to Figures 10 and 11.

[00152] Referring to Figure 8, a functional block diagram of an example of a communication flow 800 between the client side and the server side of PID application 112 is presented. For example, certain components may be bypassed in order to achieve efficiency. Communication flow 800 shows that components of client channels 200 may communicate directly with platform service components 648 (albeit through facilitation server 616). Additionally, components of client channels

200 may communicate with platform service components 648 through the server channel components 662 (again through facilitation server 616). This is important because certain tasks do not require going through the server channel components 662. Therefore, it may be more efficient to communicate directly with platform service components 648. For example, maybe when a components requesting permission to do something, the client channel 200 may communicate directly with identity subsystem 660.

[00153] Referring to Figure 9, a functional block diagram of an example of a communication flow 900 between components at the server side of PID application 112 is presented. For example, in integration and process server 646, the server channel components 662 may bypass the platform service components 648 and communicate directly with enterprise service bus 680. This scenario may be called "performant direct calling."

[00154] Referring again to Figures 8 and 9, an aspect of the invention is that PID application 112 provides flexibility in the messaging operations.

[00155] Referring to Figure 10, illustrates a functional block diagram of a portion of PID application architecture 600 and a process of performing a user login operation is presented. In this example, the process of performing a user login operation may include, but is not limited to, the following steps.

[00156] At step 1, the client (user device 118) is activated, the application is launched at the client and, therefore, the channel grid is started at the client.

[00157] At step 2, the channel grid at the client connects via AMF to client gateway 618 of the facilitation server 616 at the server.

[00158] At step 3, client gateway 618 then authenticates. For example, client gateway 618 passes the credentials (user ID and password) to the authenticate module of identity subsystem 660.

[00159] At step 4, using a session module of session manager 656, the session is checked to see whether there is already an existing session. This is done because the user 116 may have multiple user devices 118.

**[00160]** At step 5, using a personal profile module of configuration server 654, the user's personal profile is checked with respect to the user device 118. This is done to ensure that the presentation frame work (e.g., channel grid, tabs) that is delivered matches the user device 118. The user's personal profile is also checked with respect to the location.

- [00161] At step 6, an event manager module of the eventing and alerting subsystem 652 checks to see whether the user has any alerts present in case any alerts have occurring during the transition state of the user device 118.
- [00162] At step 7, the channel grid at the client checks to see whether the channels are cached locally at the client. If not cached, the channel grid at the client requests its channels from the channel server 630.
- [00163] At step 8, using an authorize module of identity subsystem 660, the channel server 630 checks to see whether the user is authorized to have the requested channels.
- [00164] At step 9, channel server 630 responds to the client with the allowed channels (sometimes updating, sometimes responding already up-to-date).
- [00165] At step 10, the channel grid is populated with channels and presented at the client (user device 118).
- [00166] An aspect of the invention is that PID application 112 provides a universal login feature. That is, once a user 116 is logged into PID application 112, no further login actions are required for accessing any information and/or services. For example, configuration server 654 and/or identity subsystem 660 may contain a record of all login information of every user 116, which is automatically applied upon accessing any information and/or services with no further action by the user 116.
- **[00167]** Referring to Figure 11, illustrates a functional block diagram of a portion of PID application architecture 600 and a process of performing data management and eventing and alerting is presented. In this example, the process of performing data management and eventing and alerting may include, but is not limited to, the following steps.

[00168] At step 1, a certain sensor channel is created and the ODS of the data management subsystem 650 begin to collect data.

- **[00169]** At step 2, the source of the data is an entity at integrated services and application layer 614, therefore, the ODS collects the data through, for example, a REST adaptor, which is one of adaptors 682. In one example, a web-service call is issued.
- [00170] At step 3, using, for example, the web-service call, an external sensor service (which is also REST) is interrogated. In one example, the external sensor service is a "temperature & humidity" service.
- [00171] At step 4, in this example, the external sensor service collects the current temperature and humidity data, reports this data back to ODS of the data management subsystem 650, and this data is stored at the ODS for historical views. In the case of eventing, this data may be sent directly to the requesting service and/or channel, if no historical records needed.
- [00172] At step 5, a CEP engine of the eventing and alerting subsystem 652, which is monitoring the data at the ODS, detects an event. For example, the CEP may be monitoring the temperature and humidity data for certain threshold values that may indicate a certain condition is present.
- [00173] At step 6, the CEP of the eventing and alerting subsystem 652 queries the event manager of the eventing and alerting subsystem 652 to see whether any user 116 has set an alert that corresponds to the current temperature and humidity condition.
- **[00174]** At step 7, it is determined that, yes, some user 116 has set an alert that corresponds to the current temperature and humidity condition. Therefore, the user's personal profile at configuration server 654 is checked to see the user's notification preferences.
- [00175] At step 8, it is checked to determine whether the user 116 has an active session in order to determine the appropriate way(s) to alert the user by considering the user's connectivity, location, time, and the like. It may be determined that the user is connected via the client via a laptop computer.

[00176] At step 9, the event manager of the eventing and alerting subsystem 652 is queried again to determine whether any other events are present in the event queue for this user. If yes, any other alerts may also be sent along with the temperature and humidity alert.

[00177] At step 10, the notification manager of the eventing and alerting subsystem 652 dispatches the notification through user's logical event queue which results in the client gateway 618 of the facilitation server 616 sending the information via JMS to the user's current channel grid.

[00178] At step 11, the message comes across the client bus of the user device 118, then a channel receives and displays the alert to the user. In this example, the alert may include information about the current temperature and humidity at some location.

**[00179]** With respect to the operation and/or use of PID application 112, this method may be summarized as follows. Certain services are written; certain complex query language is written; certain events and alerts are registered; sensor data at ODS is monitored as it related to events and alerts; if a match is detected, the event is correlated to a user; user profile and session information is queried; and the alert is transmitted to the user.

**[00180]** Referring to Figure 12, a screenshot of an example of the GUI of channel application catalog 631 of PID application 112 is presented, by which users may acquire channels for use with their devices. In this example, the GUI presents a selection of available function- and/or purpose-specific channels 200. For each channel 200, its title, category, and certain details about the channel may be displayed. A navigation bar 1210 may be presented along the bottom of the GUI, by which users may scroll from page to page of the catalog.

[00181] Referring to both Figure 3 and 12, examples of titles of channels 200 that may be found in channel application catalog 631 may be News Reader Channel, Stock Watch Channel, Business CRM Channel, Currency Channel, Banking Channel, Live News Channel, Business Calendar Channel, Email Channel, Personal Calendar Channel, Business Finance Channel, and Around Me Channel.

[00182] An aspect of the invention is that when the user 116 selects "install application" from channel application catalog 631, because the user's ID is known

and authentication is already done, the purchase transaction is processed automatically and the selected channel 200 automatically installs and synchronizes on the user's channel grid.

## [00183] NON-LIMITING EXAMPLES OF EVENTING AND ALERTING

[00184] Referring to Figure 13, another screenshot of client GUI 300 of Figure 3 that includes channel grid 318 is presented. However, in this view of client GUI 300, the touchlet 316L location of channel grid 318 is empty. Touchlet 316B is a "Stock Watch" touchlet that is associated with a "Stock Watch" channel (e.g., "Stock Watch" channel 1400 of Figure 14). The "Stock Watch" channel may provide a mechanism by which a user 116 may monitor a certain company's stock and/or financial information. In this example, the "Stock Watch" channel is monitoring the stock and/or financial information of Brocade Communications Systems, Inc (BRCD).

[00185] Referring to Figure 14, screenshots of certain components of an example of a "Stock Watch" channel 1400 of PID application 112 is presented. Figure 14 shows "Stock Watch" channel 1400 operating in a substantially full-screen mode. "Stock Watch" touchlet 316B is provided for presenting dynamic information of, interacting with, and/or launching "Stock Watch" channel 1400. "Stock Watch" channel 1400 provides a mechanism for monitoring and/or reporting certain stock and/or financial information of a company of interest. In this example, "Stock Watch" channel 1400 is monitoring Brocade Communications Systems, Inc (BRCD).

[00186] The main viewing panel 410 of the "Stock Watch" channel 1400 may include, for example, an overview window 1420, one or more information windows 1422, and a trading window 1424.

[00187] In this example, overview window 1420 shows a plot of the BRCD stock price over some selectable period of time (e.g., last hour, day, week, month, etc), as well as other statistical information about the BRCD stock. Figure 14 shows two information windows 1422. For example, one information window 1422 displays information about the latest news. The other information window 1422 displays stock information about certain other companies (i.e., companies related to BRCD in some manner). Trading window 1424 provides mechanisms by which the user 116 may perform stock trading transactions (e.g., buying and selling stock).

[00188] The "Stock Watch" channel 1400 is a good example of a channel application that to the user is seemingly a single application, but is in fact pulling publicly available information from multiple disparate data sources. For example, the real-time stock price display information in "Stock Watch" touchlet 316B and in the overview window 1420 may originate from the "Yahoo! Finance" web service, the related companies display information in an information window 1422 may also originate from the "Yahoo! Finance" web service, the plot and other statistical information in the overview window 1420 may originate from the "The Motley Fool" web service, and the "Latest News" information in an information window 1422 may originate from the "Google Finance" web service, trading window 1424 may be supported by the "TD Ameritrade" web service, and the like.

Additionally, the functions of trading window 1424 is an example of using the single sign-on (or universal sign-on) capability of PID application 112. In this example, the user 116 is already authenticated at PID application 112. Therefore, the user 116 is not prompted for any further login credentials when using trading window 1424, which may be supported by an online trading web-service, such as, but not limited to, TD Ameritrade. In this example, the user's TD Ameritrade login information is already stored in the user's profile/configuration and is automatically provided as needed by any channel application of information delivery system 100. The capability of the single sign-on (or universal sign-on) feature is not limited to user login information, user banking and/or credit card information may also be stored in the user's profile/configuration. Additionally, the single sign-on (or universal signon) feature my include login credentials with respect to the user's different user devices 118. As a result, payments information may be automatically provided as needed. In the example of TD Ameritrade, any transactions performed via trading window 1424 are handled without prompting the user 116 for payments information. The aforementioned features of PID application 112 provide convenience to the user.

**[00190]** The "Stock Watch" channel 1400 may provide mechanisms by which the user 116 may wish to respond to the alert. For example, the trading window 1424 of "Stock Watch" channel 1400 may provide mechanisms by which the user 116 may perform stock transactions, such as buying and selling stock. This is yet another example of channels of PID application 112 providing users the ability to take action

upon receiving an alert. That is, PID application 112 provides actionable eventing and alerting capability.

[00191] Information sources 114 that support "Stock Watch" channel 1400 may include, for example, one or more stocks and/or financial services, one or more news services, and the like. Any information sources 114 may be accessed through integrated services and applications layer 614 of PID application 112. Additionally, the servers of PID application 112 at application server 110 that support "Stock Watch" channel 1400 may include, but are not limited to, content delivery server 632, an analytics server 638, and a media server 644.

[00192] Referring to Figures 15 through 18, screenshots of client GUI 300 of PID application 112 and an example of a process of eventing and alerting using PID application 112 is presented. In this example, with respect to "Stock Watch" touchlet 316B and "Stock Watch" channel 1400, the user 116 sets an alert for when the BRCD share price rises above a certain value, as follows.

[00193] Figure 14 shows that by hovering the mouse over the "Stock Watch" touchlet 316B, helper window 330 is displayed to the user 116. To set an alert with respect to "Stock Watch" touchlet 316B, the user selects the "Alerts" button. As a result of selecting the "Alerts" button of helper window 330, an alerts window 334 is displayed to the user 116, as shown in Figure 16. Alerts window 334 provides a mechanism by which the user 116 may create an alert that is based, for example, on share price. As shown in Figure 16, alerts window 334 provides an entry field for entering a share price. The share price that the user enters is an example of a threshold condition or parameter for triggering an alert notification. Other controls are provided in alerts window 334 to generate the alert when the share price is "less than," "equal to," or "greater than" the share price that is entered. In one example, the user sets up an alert to occur when the share price is "less than" \$9.23. To activate this eventing and alerting process, the user 116 may select an "Apply" button of alerts window 334, which closes the window and automatically registers the event in the event manager of the eventing and alerting subsystem 652 (see Figure 6).

[00194] Accordingly, the event manager of the eventing and alerting subsystem 652 begins monitoring the data stream associated, in this example, with the BRCD stock. Figures 17 and 18 show examples of the visual components for this eventing

and alerting process. For example, the event manager of the eventing and alerting subsystem 652 monitors the BRCD data stream and when the BRCD share price is approaching the alert set point (e.g., near \$9.23), Figure 16 shows that the "Stock Watch" touchlet 316B may display a warning state to the user 116. An example of the warning state is to change the color of the border of the "Stock Watch" touchlet 316B from, for example, black to yellow. The event manager of the eventing and alerting subsystem 652 continues to monitor the BRCD data stream and when the BRCD share price is "less than" \$9.23, Figure 18 shows that the "Stock Watch" touchlet 316B may display an alert state to the user 116. An example of the alert state is to change the color of the border of the "Stock Watch" touchlet 316B to red.

[00195] In this example, the alert is delivered according to the user's configuration (notification preferences) and session. In summary, the event manager registers the event; the event manager monitors the bus, using CEP and CQL the event manager recognizes a certain condition is present; the notification manager checks the user's configuration and session; once it is determined how to notify the end-user the notification is pushed through the facilitation manager gateway (using AMF) and to the user device (client device); the client device is monitoring the client bus and receives the notification; and the notification is displayed to the user on the client device (e.g., yellow border, red border).

[00196] Referring to Figures 19 through 26, screenshots of certain channels of PID application 112 and an example of a process of combining two or more independent channels to create a new channel (and touchlet) and a process of eventing off of the combined data is presented. In this example, a user 116 may be a stock broker that hears that Cisco Systems, Inc is interested in buying Brocade Communications Systems, Inc. Therefore, there may be some very specific information that the user 116 wishes to be informed about regarding this potential transaction. Therefore, the user 116 may create a new channel and set up the desired alert notifications, as follows.

[00197] In this example, the process is using the "Latest News" touchlet 316A; the "Stock Watch" touchlet 316B, which is BRCD; and the "Stock Watch" touchlet 316C, which is Cisco Systems, Inc (CSCO); which are shown in Figure 18. That is, in this example the independent channels supporting "Latest News" touchlet 316A, "Stock

Watch" touchlet 316B, and "Stock Watch" touchlet 316C are combined to create a new channel (and touchlet). Then, an eventing and alerting process with respect to the new channel is set up with respect to the combined data.

[00198] Referring to Figure 19, in order to create a new channel, the user 116 selects an icon 336 on taskbar 312, which causes a create channel window 338 to be displayed to the user 116. A channels portion 340 of the create channel window 338 shows a list of available channels from which to build an alert. For example, the available channels are from the current channel grid 318 or from any other channel grid of the user 116. A query builder portion 342 of the create channel window 338 provides a query builder function to the user 116, which is used to generate the CQL that interacts with the event manager of the eventing and alerting subsystem 652 (see Figure 6).

[00199] Figure 20 shows that the user 116 may select a first channel, such as the "Latest News" channel from the channels portion 340, which causes the "Latest News" channel to appear in the query builder portion 342 of the create channel window 338. When a channel is designed, the developer exposes certain things that may be useful to users 116. In the case of the "Latest News" channel, a "keywords" field is provided to the user. User 116 enters, for example, the words "Brocade" and "Cisco." Once the channel is deployed, the news information of the "Latest News" channel is monitored for the words "Brocade" and "Cisco" (together in the same news feed) by the event manager of the eventing and alerting subsystem 652.

[00200] Figure 21 shows that the user 116 may select a second channel, such as the BRCD "Stock Watch" channel from the channels portion 340, which causes the BRCD "Stock Watch" channel to also appear in the query builder portion 342 of the create channel window 338. Now two channels are present in the query builder portion 342. Again, when a channel is designed, the developer exposes certain things that may be useful to users 116. In the case of the "Stock Watch" channel, a "share price" field is provided to the user along with a qualifiers dropdown menu (greater than, equal to, less than). User 116 selects, for example, a share price "greater than \$9.26." Once the channel is deployed, the share price information of the BRCD "Stock Watch" channel is monitored for this condition by the event manager of the eventing and alerting subsystem 652. The information that the user enters in the

query builder portion 342 of the create channel window 338 is an example of threshold conditions or parameters for triggering an alert notification.

[00201] Figure 22 shows that the user 116 may select a third channel, such as the CSCO "Stock Watch" channel from the channels portion 340, which causes the CSCO "Stock Watch" channel to also appear in the query builder portion 342 of the create channel window 338. Now three channels are present in the query builder portion 342. User 116 selects, for example, a share price "greater than \$23.63." Once the channel is deployed, the share price information of the CSCO "Stock Watch" channel is monitored for this condition by the event manager of the eventing and alerting subsystem 652.

[00202] The query builder portion 342 of the create channel window 338 allows Boolean operations between the selected channels. For example, the user 116 may be provided AND, OR, ANDNOT, and XOR functions. In this example, the user selects the "Latest News" channel AND the BRCD "Stock Watch" channel AND the CSCO "Stock Watch" channel. In this way, an alert is generated when the following condition is present: Both the words "Brocade" and "Cisco" are detected in the "Latest News" channel AND when a share price "greater than \$9.26" is detected via the BRCD "Stock Watch" channel AND when a share price "greater than \$\$23.63" is detected via the CSCO "Stock Watch" channel.

[00203] The query builder portion 342 of the create channel window 338 also provides notification settings. For example, the user 116 may select notify by: Current Device, Email, IM, SMS, Mobile, and the like. The user 116 may select one or more. The query builder portion 342 of the create channel window 338 also provides channel name field. In one example, the user 116 enters "Custom Alert." When the setup is complete, the user 116 selects a "Create Channel" button to deploy the new "Custom Alert" channel. By pressing the "Create Channel" button, certain processes occur, such as, but not limited to, the channel server 630 is updated accordingly, a touchlet is created and loaded into the client, all events set up on the menu are registered with the event manager, the user's configuration is updated with the notification preferences for this channel, the event manager begins monitoring the data streams according to the query. The touchlet is updated in real time as to the status of the three variables.

[00204] In this example and referring now to Figure 23, a "Custom Alert" touchlet 316L is created and presented in channel grid 318. The "Custom Alert" touchlet 316L displays the three components that the channel is eventing off. In this view, the "Custom Alert" touchlet 316L displays the three components (e.g., news, BRCD, and CSCO), which are all in a no alert condition. In one example, the no alert condition for each component is to display the component in a green color in the "Custom Alert" touchlet 316L. Therefore, Figure 23 shows all three components in green to indicate that no alert conditions are present.

[00205] Referring now to Figure 24, two of the three alert conditions are met and the "Custom Alert" touchlet 316L displays a warning state to the user 116. In this example, the BRCD and the CSCO conditions are met, but the news condition is not yet met. Therefore, the color of the BRCD and CSCO components may be changed from green to yellow, while the news component remains green. In this way, the user 116 may perceive a warning that, while the alert condition is not yet fully met, an alert may be eminent.

[00206] Referring now to Figure 25, all three alert conditions are met and the "Custom Alert" touchlet 316L displays an alert state to the user 116. In this example, the news, BRCD, and CSCO conditions are met. Therefore, the color of the news, BRCD, and CSCO components in the "Custom Alert" touchlet 316L may be changed to red. In this way, the user 116 may receive the notification that the alert condition is fully met.

[00207] Accordingly, an aspect of the invention is that PID application 112 provides the capability to combine information of two or more channels to create a another information channel, such as combining information associated with "Latest News" channel, the BRCD "Stock Watch" channel, and the CSCO "Stock Watch" channel to create a new channel that is represented by "Custom Alert" touchlet 316L. Additionally, upon the creation of this new channel, this new channel may be automatically installed and synchronized across all of the user's user devices 118 so that that the new channel appears on all user devices 118. Optionally, the user can manually update his/her user devices 118 (e.g., via drag and drop function).

[00208] Referring again to Figure 25, in this view other alerts are presented in certain touchlets 316 of channel grid 318. For example, touchlet 316H, which may be

a business calendar channel, is displaying a "You have 4 scheduled meetings today" alert. Touchlet 316I, which may be an email channel, is displaying a "4 unread messages" alert. Both of these alerts are example of non-actionable alerts, as these are informational alerts that do not require user action. For example, the user may choose or not choose to launch the email channel and read his/her emails. However, if the user should choose to launch the email channel and read his/her emails, the "4 unread messages" alert is cleared.

[00209] Referring now to Figure 26, the "Custom Alert" channel provides an alert that is actionable. That is, upon receiving the alert via "Custom Alert" touchlet 316L, the user 116, who may be a stock broker, may take certain action. By clicking on the "Custom Alert" touchlet 316L, which may be in an alert state, the associated "Custom Alert" channel 2600 may be presented to the user 116. For example, Figure 26 shows an example of the GUI for the "Custom Alert" channel 2600. The GUI for the "Custom Alert" channel 2600 may include, for example, a query parameters portion 2610 and an actions portion 2612.

[00210] The query parameters portion 2610 allows the user 116 to, for example, adjust the query parameters, add more conditions, change conditions, remove conditions, and the like. The actions portion 2612 allows the user 116 to perform certain actions based on the alert. For example, the actions portion 2612 may provide mechanisms by which the user 116 may perform stock trading transactions (e.g., buying and selling stock), similar to trading window 1424 of "Stock Watch" channel 1400 of Figure 14, which may be supported by the "TD Ameritrade" web service.

[00211] The "Custom Alert" channel 2600 is used to generate an alert that is of particular importance to the user 116. The "Custom Alert" channel 2600 is an example of the user-centric aspect of PID application 112 in which only information that is of most importance to the user is processed and/or presented to the user 116. The aforementioned process of combining two or more independent channels to create a new channel (and touchlet) and a process of eventing off of the combined data is an example of the capability of PID application 112 to allow the user 116 to action based on disparate data that is of interest to the user and conditions set by the user.

## [00212] NON-LIMITING EXAMPLES OF CONSUMER APPLICATIONS

**[00213]** For the purpose of illustration, Figures 27 through 51 describe non-limiting examples of channels 200 that may be suitable for consumer use. However, these examples are not limited to consumer use only. The channels described in Figures 27 through 51 may also be suitable for enterprise applications (e.g., corporate environments).

[00214] Referring to Figures 27 through 40, screenshots of an example of a "Television" channel of PID application 112 is presented. In the discussion herein, let the reader beware that the meaning of the term "channel" within the context of PID application 112 is not to be confused with the standard consumer terminology of a TV channel. When referring to the standard terminology of a TV channel, the standard TV channel is hereafter referred to as a "traditional TV channel."

[00215] Figure 27 shows a screenshot of a "Television" channel GUI 2700 that is being displayed on a tablet device 2710, which is one example of a user device 118 (i.e., a client device). The "Television" channel GUI 2700 may have been launched using a "Television" touchlet (not shown) of a certain channel grid (not shown) of a certain user 116. Upon touching, clicking, or otherwise selecting the "Television" touchlet, the underlying "Television" channel (e.g., a "Television" channel 2720 shown in Figure 28) is launched, which in turn launches "Television" channel GUI 2700 to be presented to the user. "Television" channel GUI 2700 displays yet another television-specific channel grid, such as a channel grid 2712.

[00216] The "Television" channel is designed to impart certain capabilities to any user device 118, such as tablet device 2710, with respect to viewing and/or interacting with content on a television. For example, tablet device 2710 is capable to provide a TV remote control function, capable to display any dynamic content to the user 116, capable of allowing user interaction with the content, and the like.

**[00217]** For example, a set of TV controls 2714 that provide interfacing features are rendered on the display of tablet device 2710. Preferably, the display of tablet device 2710 is a touch screen. Therefore, TV controls 2714 are touch controls. TV controls 2714 may include, for example, pause and play controls, fast forward and

rewind, volume up/down controls, mute, 50% mute, traditional TV channel up/down controls, and TV on/off controls. TV controls 2714 may be rendered in any position on the display that provide ease of use for the user. For example, TV controls 2714 may be arranged on one side of the display, on both sides of the display, along the top of the display, and the like.

[00218] Channel grid 2712 contains multiple touchlets for presenting dynamic information of, interacting with, and/or launching any content that a user 116 may be likely to watch on his/her TV set, which is itself another user device 118 (i.e., another client device). For example, channel grid 2712 may include, for example, touchlets for TV shows, touchlets for movies, touchlets for TV service providers, touchlets for movies providers, touchlets for any streaming video content, and the like. In one example, the user 116 may select a "Master Chef" touchlet 2730 (shown in Figure 28), which launches an underlying channel application in substantially full-screen mode, as shown in Figure 28, by which the user may watch the Master Chef TV show.

[00219] For example, Figure 28 shows "Television" channel 2720 operating in a substantially full-screen mode. "Television" channel 2720 is launched from channel grid 2712 by, for example, using the "Master Chef' touchlet 2730. Figure 28 also shows a TV 2740 by which the user 116 is able to watch the Master Chef TV show. While TV 2740 is displaying the Master Chef TV show itself, the user 116 may select a "What's On" button (not shown) in order to view episode information about the Master Chef TV show on tablet device 2710. The TV services provider's electronic programming guide (EPG) may be the source of this episode information. Additionally, an ad window 2750 is included in the display. Dynamic and/or static information from any source may be displayed in ad window 2750. While contextually related to one another, the main display showing the episode information and the ad window 2750 are two separate and distinct entities.

**[00220]** The user 116 may use any of the TV controls 2714 (e.g., pause/play, volume, traditional TV channel up/down) for controlling TV 2740 from tablet device 2710. Additionally, the user 116 may interact with the "Bon Appetit" magazine ad that is displayed in ad window 2750. Further, user 116 may select a certain "Simul-Stream" button 2760 to play the TV show on both TV 2740 and tablet device 2710.

[00221] Figure 29 shows that the user 116 may decide to switch to another show. Therefore, the user 116 touches the channel up/down control to locate a TV show called Fringe.

[00222] Figure 30 shows that the user 116 may decide to watch Fringe instead. As a result, Fringe episode information is displayed on tablet device 2710, while the TV show is playing at TV 2740. Figure 30 also shows that a Coke Zero ad is playing on TV 2740. By querying the metadata associated with the digital TV broadcast, PID application 112 is able to detect (1) that a commercial is playing on TV 2740 and (2) that the ad content is about Coke Zero. Therefore, other Coke Zero ad information may be displayed in ad window 2750 at tablet device 2710 substantially concurrently to the Coke Zero ad running on TV 2740. This is an example of synchronization feature of PID application 112, which may be performed using stream sync server 636 of PID application architecture 600 of Figure 6.

[00223] Referring again to Figure 30, the user 116 may choose to pause the TV show from tablet device 2710 and interact with the Coke Zero ad in ad window 2750. For example, the user 116 touches the "Play the Coke Zero Football Challenge" text in ad window 2750 and the game is then launched and displayed as shown in Figure 31. This is an example of user interaction with information that is delivered by information delivery system 100 to the user 116 on a user device 118. More specifically, this is an example of interactive ads and games.

[00224] Figure 32 shows that the user 116 may finish playing the Coke Zero game and decide to resume watching the TV show Fringe on TV 2740. Again, Fringe episode information is displayed on tablet device 2710. Figure 32 also shows that a Ford ad is playing on TV 2740. Again, PID application 112 is able to detect (1) that a commercial is playing on TV 2740 and (2) that the ad content is about Ford. In this example, while a national Ford ad is playing on TV 2740, a local Ford dealer ad information may be displayed in ad window 2750 substantially concurrently to the Ford ad running on TV 2740. This is another example of synchronization feature of PID application 112, which may be performed using stream sync server 636 of PID application architecture 600 of Figure 6. More specifically, this is an example of synchronizing a local ad in the ad window 2750 at tablet device 2710 with a content-related national ad playing on TV 2740. Referring again to Figures 27 through 40,

"Television" channel 2720 demonstrates that an aspect of the invention is that PID application 112 may facilitate presentation of synchronized ad information.

[00225] Figures 33 through 36 illustrate a social feature of "Television" channel 2720. For example, Figure 33 shows that an alert notification appears on the display of tablet device 2710. The alert notification is informing the user 116 that a friend is also watching Fringe. This is an example of the configuration server 654, eventing and alerting subsystem 652, and session manager 656 of PID application 112 working together to determine whether an event has occurred that may trigger an alert of the user 116, then to determine whether the user 116 has an active session and at what user device 118, and then to determine the preferred alert notification method. This is an example of the eventing and alerting features of PID application 112.

[00226] The user 116 may touch a "Chat" button 2764 to launch a "Social" component of "Television" channel 2720, as shown in Figure 34. For example, Figure 34 shows a chat window 2752 that may display a list of the friends of user 116. The one or more friends that are watching the same TV show as the user 116 may be indicated to the user 116 by, for example, a color bar. Additionally, a show discussion may appear in the chat window 2752.

[00227] Figure 35 shows that the user 116 may decide to look at a Social Guide that is displayed in social guide window 2754. For example, the social guide window 2754 may display what all of user 116's friends are watching as well as what everyone else is watching. Figure 36 shows that the user 116 may access the TV show as well as chat from the social guide window 2754. This is an example of channels of PID application 112 providing users the ability to take action upon receiving an alert. That is, PID application 112 provides actionable eventing and alerting capability. For example, the user 116 responds to the alert by selecting the Social Guide and chatting with his/her friend.

[00228] Figure 37 shows a search feature of "Television" channel 2720. For example, Figure 37 shows a search window 2756 by which the user 116 may enter the name of a TV show and the airing days and times for that TV show may be displayed at tablet device 2710.

**[00229]** Figure 38 shows the electronic programming guide (EPG) feature of "Television" channel 2720. For example, the user may select the programming guide and the TV service provider appears in an EPG window 2758. The program listings for certain traditional TV channels for the current day and time slot are displayed. The user 116 may scroll to other pages of the programming guide.

- [00230] Figure 39 shows that the user 116 may return to the Social Guide, which is displayed in social guide window 2754, and then decides to watch the TV show called The Mentalist.
- [00231] Figure 40 shows that the user 116 is watching The Mentalist on TV 2740, while The Mentalist episode information is displayed on tablet device 2710. Figure 40 also shows an alert that another friend is also watching The Mentalist.
- **[00232]** Referring again to Figures 27 through 40, "Television" channel 2720 demonstrates that an aspect of the invention is that PID application 112 may facilitate social interactions. That is, because of the system integration, PID application 112 knows what users are consuming what content and at what time.
- [00233] Referring yet again to Figures 27 through 40, information sources 114 that support "Television" channel 2720 may include, but are not limited to, digital TV service providers, social networking providers, national and local advertising providers, and the like. Any information sources 114 may be accessed through integrated services and applications layer 614 of PID application 112. Additionally, the servers of PID application 112 at application server 110 that support "Television" channel 2720 may include, but are not limited to, content delivery server 632, stream sync server 636, analytics server 638, advertising server 640, transcoding server 642, and media server 644.
- [00234] Referring to Figures 41 through 44, various screenshots of certain components and operations of an example of a "Home Security" channel 4300 of PID application 112 and a process of alerting a user is presented.
- [00235] Figure 41 shows a screenshot of an example of a client GUI 4100 of PID application 112 that includes a set of touchlets 4110 in channel grid 318 of main viewing panel 310. Among the touchlets of channel grid 318 is a "Home Security" touchlet 4110J for presenting dynamic information of, interacting with, and/or

launching the "Home Security" channel 4300 (shown in Figure 43). "Home Security" touchlet 4110J is shown in a "no alert present" state. In one example, in the "no alert present" state "Home Security" touchlet 4110J displays an image of a green shield. By contrast, Figure 42 shows "Home Security" touchlet 4110J in an "alert present" state. In one example, when the "alert present" state occurs, the color of the "Home Security" touchlet 4110J changes to red and displays information about the alerts, such as a "Motion Detected" message.

[00236] Figure 43 shows "Home Security" channel 4300 operating in a substantially full-screen mode. "Home Security" channel 4300 provides a mechanism for monitoring and/or reporting information about the user 116's home security system. Main viewing panel 410 of "Home Security" channel 4300 may include, for example, a status window 4310 and one or more video feed windows 4312. In this example, four video feeds from four cameras in four respective locations in the user's home are presented. The video feed that is related to a particular alert condition may be color coded to stand out the viewer. For example, Figure 43 shows the backyard video feed highlighted in red, while the others are not highlighted in red. The status window 4310 shows in text form any alert conditions that are present as well as any useful control buttons. For example, a keypad button 4314 may be provided for launching a keypad window 4316, as shown in Figure 44. The keypad window 4316 provides a mechanism by which the user may interact remotely with his/her home security system via any user device 118. This is another example of channels of PID application 112 providing users the ability to take action upon receiving an alert. That is, PID application 112 provides actionable eventing and alerting capability. For example, by viewing the video feed, the user 116 may determine that the motion detected was caused by an animal in his/her backyard. Therefore, the user 116 may use keypad window 4316 to clear the alert condition.

[00237] Information sources 114 that support "Home Security" channel 4300 may include, for example, one or more home security services. Any information sources 114 may be accessed through integrated services and applications layer 614 of PID application 112. Additionally, the servers of PID application 112 at application server 110 that support "Home Security" channel 4300 may include, but are not limited to, content delivery server 632 and media server 644.

[00238] Referring to Figure 45, tablet device 2710 of Figure 27 and certain components of an example of a "NetFlix" channel 4500 of PID application 112 is presented. In this example, "NetFlix" touchlet 4510 may be used for presenting dynamic information of, interacting with, and/or launching the "NetFlix" channel 4500. In this example, "NetFlix" channel 4500 is designed simply to access NetFlix via its URL address (<a href="https://www.netflix.com/">https://www.netflix.com/</a>) on the Internet, then simply wrap the content that is returned in a web browser, and then present the content on the display of tablet device 2710 (i.e., a user device 118). The user may interact with the NetFlix web content as if interacting using any computer.

[00239] The use of "NetFlix" channel 4500 is an example of the user taking advantage of the single login (or universal login) capabilities of information delivery system 100. Outside of the PID application 112 environment, a user would be asked to login to the NetFlix website. However, in the PID application 112 environment, the login operation is performed automatically by the identity subsystem 660, with no user actions.

[00240] Information sources 114 that support "NetFlix" channel 4500 may include, for example, the NetFlix web service. Any information sources 114 may be accessed through integrated services and applications layer 614 of PID application 112. Additionally, the servers of PID application 112 at application server 110 that support "NetFlix" channel 4500 may include, but are not limited to, content delivery server 632, stream sync server 636, advertising server 640, and a media server 644.

[00241] Referring to Figures 46 and 47, screenshots of certain components of an example of a "Remote Healthcare" channel 4600 of PID application 112 is presented. Figures 46 and 47 show "Remote Healthcare" channel 4600 operating in a substantially full-screen mode. A "Remote Healthcare" touchlet 4610 is provided for presenting dynamic information of, interacting with, and/or launching "Remote Healthcare" channel 4600. "Remote Healthcare" channel 4600 provides a video conferencing service between any entities related to healthcare, such as, but not limited to, patients, patients' family members, doctors, nurses, pharmacists, and the like.

[00242] Main viewing panel 410 of "Remote Healthcare" channel 4600 may include, for example, a video feed window 4612, a health questions window 4614,

and a health overview window 4616. Video feed window 4612 may display a video feed of any persons, for example, participating in a medical consultation session. For example, Figure 46 shows a video feed of the patient only, while Figure 47 shows both the patient and the doctor are conferenced in. In this example, the patient is one user 116 and the doctor is another user 116 of information delivery system 100.

[00243] Health questions window 4614 may contain a questionnaire. The patient may interact with the questionnaire, thereby providing important medical information for those joining the medical consultation session. Additionally, health overview window 4616 may provide various current, historical and trend sensor information related to the patient health (e.g., sensor data that is returned from certain devices that are used by the patient). One example is a USB-enabled blood pressure device. In this example, the patient's blood pressure, pulse rate, and oxygen levels are reported in health overview window 4616.

[00244] Via the video feed and audio feed capabilities of "Remote Healthcare" channel 4600, a patient may receive advice from his/her healthcare providers without an actual visit to the healthcare provider's office. Additionally, family members of the patient may also participate in the session remotely, again avoiding travel. As a result of the medical consultation using "Remote Healthcare" channel 4600, the doctor may wish to prescribe certain medication. Accordingly, a channel of PID application 112 for managing a patient's treatment regimen is described with reference to Figure 50.

[00245] Referring to Figure 48, screenshots of certain components of an example of a "My Medicine Cabinet" channel 4800 of PID application 112 is presented. Figure 48 shows "My Medicine Cabinet" channel 4800 operating in a substantially full-screen mode. A "My Medicine Cabinet" touchlet 4810 is provided for presenting dynamic information of, interacting with, and/or launching "My Medicine Cabinet" channel 4800. "My Medicine Cabinet" channel 4800 provides a mechanism for managing a treatment regimen of a patient and is suitable for use by, for example, patients, patients' family members, doctors, nurses, pharmacists, and the like.

[00246] Main viewing panel 410 of "My Medicine Cabinet" channel 4800 may include, for example, a treatment regimen window 4812 and a calendar window 4814. Treatment regimen window 4812 displays, for example, a daily view of any

medications that have been prescribed to a certain user 116 and dosage information. Alerts may be generated base on the dosage information (e.g., as to when a patent is due to take a certain medication). Calendar window 4814 may display, for example, a monthly view of any medications that have been prescribed to a certain user 116. Alerts may be generated base on this information (e.g., as to when a certain prescription needs to be refilled).

[00247] Information sources 114 that support "Remote Healthcare" channel 4600 and/or "My Medicine Cabinet" channel 4800 may include any healthcare service provider databases, where the healthcare service providers may be, for example, doctors, hospitals, pharmaceutical companies, pharmacies, and the like. Any information sources 114 may be accessed through integrated services and applications layer 614 of PID application 112. Additionally, the servers of PID application 112 at application server 110 that support "Remote Healthcare" channel 4600 and/or "My Medicine Cabinet" channel 4800 may include, but are not limited to, content delivery server 632, collaboration media server 634, analytics server 638, and a media server 644.

[00248] Referring to Figure 49, screenshots of certain components of an example of an "MS Word" channel 4900 of PID application 112 is presented. Figure 49 shows "MS Word" channel 4900 operating in a substantially full-screen mode. A "MS Word" touchlet 4910 is provided for presenting dynamic information of, interacting with, and/or launching "MS Word" channel 4900. "MS Word" channel 4900 provides a mechanism for processing MS Word documents to users 116.

[00249] Main viewing panel 410 of "MS Word" channel 4900 may include, for example, a viewing/editing window 4912, in which a user 116 may open, view, and/or edit MS Word documents. "MS Word" channel 4900 is an example of accessing an application that may already be installed and running on a user device 118. For example, "MS Word" channel 4900 may launch the local MS Word application running as a native application on a laptop or desktop computer and then present the Word document to the user 116.

[00250] Referring to Figure 50, screenshots of certain components of an example of an "Email" channel 5000 of PID application 112 is presented. Figure 50 shows "Email" channel 5000 operating in a substantially full-screen mode. An "Email"

touchlet 5010 is provided for presenting dynamic information of, interacting with, and/or launching "Email" channel 5000. "Email" channel 5000 provides an email service to the user 116.

[00251] Main viewing panel 410 of "Email" channel 5000 may include an inbox window 5012 and a folders window 5014. The inbox window 5012 displays emails in the user's inbox. Folders window 5014 may display various email folders including the user's address book. Figure 50 shows that the information about the sender of the email currently being viewed may be displayed, including a photo.

[00252] Information sources 114 that support "Email" channel 5000 may include at least one email provider or a combination of multiple email providers. Any information sources 114 may be accessed through integrated services and applications layer 614 of PID application 112. Additionally, the servers of PID application 112 at application server 110 that support "Email" channel 5000 may include, but are not limited to, content delivery server 632, analytics server 638, and media server 644.

[00253] Referring to Figure 51, screenshots of certain components of an example of a "News Reader" channel 5100 of PID application 112 is presented. Figure 51 shows "News Reader" channel 5100 operating in a substantially full-screen mode. A "News Reader" touchlet 5110 is provided for presenting dynamic information of, interacting with, and/or launching "News Reader" channel 5100. "News Reader" channel 5100 provides a news presentation service to users 116.

[00254] Main viewing panel 410 of "News Reader" channel 5100 may include, for example, a subscriptions window 5112 and a news story window 5114. Subscriptions window 5112 may display, for example, folders of any news feeds to which the user 116 is subscribed. News story window 5114 may display, for example, any news content of the day. Alerts may be set to notify the user, for example, when any subscriptions are due to expire. Upon receiving such an alert, "News Reader" channel 5100 may provide mechanism by which the user 116 may renew subscriptions. This is another example of channels of PID application 112 providing users the ability to take action upon receiving an alert. That is, PID application 112 provides actionable eventing and alerting capability.

[00255] The use of "News Reader" channel 5100 may be an example of the user taking advantage of the single login (or universal login) capabilities of information delivery system 100. Outside of the PID application 112 environment, a user would be asked to login to the news service provider. However, in the PID application 112 environment, the login operation is performed automatically by the identity subsystem 660, with no user actions.

[00256] Information sources 114 that support "News Reader" channel 5100 may include, for example, any news web service. Any information sources 114 may be accessed through integrated services and applications layer 614 of PID application 112. Additionally, the servers of PID application 112 at application server 110 that support "News Reader" channel 5100 may include, but are not limited to, content delivery server 632, stream sync server 636, analytics server 638, advertising server 640, and a media server 644.

## [00257] NON-LIMITING EXAMPLES OF ENTERPRISE APPLICATIONS

[00258] For the purpose of illustration, Figures 52 through 72 describe non-limiting examples of channel grids 318 and channels 200 that may be suitable for enterprise use (e.g., corporate and business environments and/or across business ecosystems, such as supplier and contractor networks). However, these examples are not limited to enterprise use only. The channels described in Figures 52 through 72 may also be suitable for consumer and/or other applications. A certain enterprise may provide a suite of channel grids 318 and channels 200 that may be useful for performing any tasks related to the enterprise. In one example, the suite of channels 200 may be arranged in a suite of channel grids 318 in which each channel grid 318 includes a unique set of related touchlets 316 for accessing the underlying channels 200. The availability and/or functionality of the channels 200 and/or touchlets 316 may vary based on groups, functions, roles, tasks and/or individuals in the enterprise.

[00259] Currently, the data associated with an enterprise may originate from legacy systems. Examples of legacy applications may include, but are not limited to Human Resource Management (HRM), Enterprise Resource Management (ERP), Product Life Cycle Management (PLM), Customer Relationship Management (CRM) systems and tools. However, these tools and systems are optimized for certain corporate uses and to serve internal corporate reporting needs and often work poorly for management

decision making purposes. These legacy tools may work well for generating monthly corporate reports, but may not work well for performing real-time analysis for decision makers. For example in managing customer sales accounts, information may be required in real-time from the ERP, PLM and CRM systems. Additionally, useful information may be available from legacy systems, but may be very difficult to access and present in a way that is meaningful to the user to understand and take action on. As an example a sales account manager looking for a global weekly sales estimate, may spend a lot of time searching for customer sales information across different corporate systems instead of acting on the information and visiting customers who sales are trending downward. Further, there is typically more information available than a user can easily find, interpret, and organize in a meaningful way.

[00260] Therefore, an aspect of the invention is that PID application 112 of information delivery system 100 may be used in combination with legacy tools that are deployed to process data in the legacy enterprise environment. In this way, certain channels 200 may be created to provide user-centric content and insights in the enterprise environment. That is, the channels 200 may provide content and insights that are tailored to the needs of users116, by presenting content meaningful to the user. Additionally, PID application 112 of information delivery system 100 may be used to extract, aggregate or consolidate legacy data across multiple legacy systems and then organize and present the data in a meaningful way via a channel 200.

[00261] Enterprises may have analytic teams that produce useful analytical reports from legacy systems, but information available via these analytical reports may be very detailed, for a narrow audience, difficult to interpret, and may be out of date by the time the data is accessed. Therefore, an aspect of the invention is that PID application 112 of information delivery system 100 allows data to be readily consumed, with insights and with narrow windows, and allows users 116 to take rapid action, thereby adding value to this data. The system also allows for the user to interrogate data drawing further insights into the enterprise.

[00262] Referring to Figure 52, a screenshot of an example of an enterprise client GUI 5200 is presented that includes an example of a login window. In this example, the taskbar 312 of enterprise client GUI 5200 may include a company name field 313. In one example, the company name field 313 is populated with "PQR Corporation."

In the corporate and/or business environment, users 116 may be, for example, employees, contractors, suppliers, regulators, government officials, and/or any other individuals authorized to access enterprise client GUI 5200. In order to gain access to the system, a user login window 5210 may be presented in main viewing panel 310 by which the user may enter his/her username and password. Once the user and and/or the device is authenticated, a suite of channels and/or channel grids may be presented to the user 116. Examples of channel grids that may be associated with an enterprise are shown in Figures 53 and 54.

[00263] Referring to Figures 53 and 54, screenshots of enterprise client GUI 5200 showing two example channel grids that may be related to the enterprise are presented. For example, Figure 53 shows a channel grid 318a that is displayed when the user 116 selects a channel grid icon 324a of the navigation bar 314. Figure 54 shows a channel grid 318b that is displayed when the user 116 selects a channel grid icon 324b of the navigation bar 314. Channel grid 318a of Figure 53 is used to display a first set of touchlets 316 (e.g., touchlets 316A through 316L) that are associated with a first set of channels 200 (not shown). Likewise, channel grid 318b of Figure 55 is used to display a second set of touchlets 316 (e.g., touchlets 316M through 316X) that are associated with a second set of channels 200 (not shown). In one example, channel grid 318a of Figure 53 may be used to display a set of touchlets 316 that are related to enterprise as a whole, such as to PQR Corporation as a whole. By contrast, channel grid 318b of Figure 54 may be used to display a set of touchlets 316 that are related to a certain division, group and/or sales account of the enterprise, such as a certain division, group and/or sales account of PQR Corporation.

[00264] Referring now to Figure 53, by way of example channel grid 318a may include an "Email" touchlet 316A, a "Personal Calendar" touchlet 316B, a "My Company in the Press" touchlet 316C, a "News Reader" touchlet 316D, a "New Technologies" touchlet 316E, a "What is Selling" touchlet 316F, an "Analytics Tool Set" touchlet 316G, a "myNet" touchlet 316H, a "Channel Catalog" touchlet 316I, a "My HR" touchlet 316J, a "My Performance" touchlet 316K, and a "Currency Converter" touchlet 316L.

[00265] "Email" touchlet 316A of channel grid 318a may be associated with an "Email" channel, such as, but not limited to, "Email" channel 5000 of Figure 50. The

"Email" channel may be the users' corporate email application or a consolidation of various user email accounts. The "Email" channel may include additional features such as connecting an email address to an address book entry with a picture of the contact.

[00266] "Personal Calendar" touchlet 316B of channel grid 318a may be associated with a "Personal Calendar" channel, such as, but not limited to, a "Personal Calendar" channel 5500 of Figure 55. The "Personal Calendar" channel may, for example, provide a listing of all commitments, meetings, to do lists and the like. "Personal Calendar" channel may use active alerts to notify the user of upcoming events, such as a meeting.

[00267] "My Company in the Press" touchlet 316C of channel grid 318a may be associated with a "My Company in the Press" channel (not shown). The "My Company in the Press" channel may provide, for example, live videos; streaming news feeds; access to news archive by hour, day, week, and/or month; access to YouTube; and any combinations thereof. Examples of content on the "My Company in the Press" channel may include, but are not limited to, news interviews, company advertisements, product reviews, and annual shareholder meetings.

[00268] "News Reader" touchlet 316D of channel grid 318a may be associated with a "News Reader" channel, such as, but not limited to, the "News Reader" channel 5100 of Figure 51. For example, the "News Reader" channel 5100 may provide company RSS feeds (e.g., PQR Corporation RSS feeds) from multiple internal and external sources, such as from an internal Twitter account and the New York Times.

[00269] "New Technologies" touchlet 316E of channel grid 318a may be associated with a "New Technologies" channel (not shown). For example, the "New Technologies" channel may provide access to a forum for company product announcements, a recap of latest insights from the company research and development group, thought provoking concepts in the industry, promotional and training video, and the like.

[00270] "What is Selling" touchlet 316F of channel grid 318a may be associated with a "What is Selling" channel (not shown). For example, the "What is Selling"

channel may provide information about certain products, for example, product orders by hour, day, week, month, and/or quarter, information about client wins or loses, information about top sales managers, sales recognitions, and the like.

[00271] "Analytics Tool Set" touchlet 316G of channel grid 318a may be associated with an "Analytics Tool Set" channel (not shown). For example, the "Analytics Tool Set" channel may provide a set of Statistical Analysis Software (SAS) products and/or related analytic products for users to analyze specific trends in data sets, access to business analytics services, drill down capability, report generation and the like.

[00272] "myNet" touchlet 316H of channel grid 318a may be associated with a "myNet" channel, such as, but not limited to, a "myNet" channel 5600 of Figure 56. For example, the "myNet" channel 5600 may provide a compilation of company-specific social sites (e.g., PQR Corporation-specific social sites). The "myNet" channel 5600 may provide simple tools to enable posting of a comment to multiple forums.

[00273] "Channel Catalog" touchlet 316I of channel grid 318a may be associated with a channel application catalog, such as, but not limited to, channel application catalog 631 of Figure 12, a channel application catalog 6500 of Figure 65, and a channel application catalog 6700 of Figure 67. The channel application catalog is accessed to download certain channel grids and/or channels. The catalog may provide free and for pay channels. Channel application catalogs may be sensitive to a user's role and rights within the enterprise. More details about user roles and user groups in an enterprise are described with reference to Figures 62 through 67.

[00274] "My HR" touchlet 316J of channel grid 318a may be associated with a "My HR" channel (not shown). For example, the "My HR" channel may provide access to all personal HR-related information, such as benefits, vacation time, savings account, required training, policies and procedures, and the like. The "My HR" channel has the capability to alert users to, for example, out of boundary conditions, such as expiring vacation or the need to take health and safety training. Also, the "My HR" channel may provide access to content based on user level and user identity.

[00275] "My Performance" touchlet 316K of channel grid 318a may be associated with a "My Performance" channel (not shown). For example, the "My Performance" channel may provide a composite of all metrics (e.g., based on user level and user identity) that are translated into incentive compensation or related reward schema. Automatic alerts may be generated when HR-defined thresholds for performance are missed and/or exceeded.

The "My HR" channel and the "My Performance" channel may be an [00276] example of using data associated with an enterprise that may originate from legacy systems, such as from a legacy HR system and ERP system, and then tailoring the data to present information to users 116 in a meaningful way that is of particular interest. For example, for each employee, the legacy HR system may provide information about each employee's department, region, level, position, role, and the like. Using information delivery system 100 of the present invention, this information may be loaded into the user profiles. Accordingly, information delivery system 100 may be used to create and assign roles and/or groups from the information of the legacy HR system. For example, HR functions may have a management group that writes performance reviews, a director group that approves the reviews, a senior management group that audits the reviews, and the like. In one example, a director will not be asked to approve a review until the manager completed the final review. The ERP system may provide information about the employee's performance (e.g. customer orders booked for the year) from the "My Performance" channel to information delivery system 100 of the present invention in order to assist the manager in creating the review.

[00277] "Currency Converter" touchlet 316L of channel grid 318a may be associated with a "Currency Converter" channel (not shown). For example, the "Currency Converter" channel may provide a real-time conversion calculator set, for example, by user identity, user location, user role, and the like. The "Currency Converter" channel may be optimized per the company finance department for metrics important to the user, such as sales by division, group, and/or employee. For example, the "Currency Converter" channel may provide internal company estimates for future sales in every country in which the company does business and in the currency most commonly used in the user's location.

[00278] Referring now to Figure 54, by way of example channel grid 318b may include a "Stock Watch" touchlet 316M, an "Account Calendar" touchlet 316N, a "News Reader" touchlet 316O, a "myNet" touchlet 316P, a "Real-time Profit & Loss" touchlet 316Q, an "Account Bookings" touchlet 316R, a "Sales Pipeline" touchlet 316S, a "Personnel Locator" touchlet 316T, a "Channel Catalog" touchlet 316U, an "Open Room" touchlet 316V, a "Security Threat Trends" touchlet 316W, and a "Room Finder" touchlet 316X.

[00279] "Stock Watch" touchlet 316M of channel grid 318b may be associated with a "Stock Watch" channel, such as, but not limited to, "Stock Watch" channel 1400 of Figure 14. For example, the "Stock Watch" channel may be configurable to deliver competitive industry performance, such as balance sheet ratios or other suitable indicators of financial health. The "Stock Watch" channel may provide real-time quotes and capability to set thresholds with alerts.

[00280] "Account Calendar" touchlet 316N of channel grid 318b may be associated with an "Account Calendar" channel (not shown). The "Account Calendar" channel may provide a sales account team calendar function that may be sales account-specific. The "Account Calendar" channel maybe used for tracking sales meetings, order entry deadlines, payment dates, quarterly close dates, any information that pertains to the sales account, and the like. Using the "Account Calendar" channel, the user may, for example, merge client sales demo events and trade show attendance dates into the "Account Calendar" channel, in order to build composite situational awareness for everything that is occurring in the sales account. The "Account Calendar" channel may provide alert mechanisms to push notifications when deadlines are approaching. The "Account Calendar" channel may also merge and/or combine with other channels. For example, the "Account Calendar" channel may merge and/or combine with the "Room Finder" channel in order to acquire information about sales meeting locations.

[00281] Similar to "News Reader" touchlet 316D of channel grid 318a, "News Reader" touchlet 316O of channel grid 318b may be associated with a "News Reader" channel, such as, but not limited to, the "News Reader" channel 5100 of Figure 51. For example, this "News Reader" channel may be a company division-, group- and/or account-specific "News Reader" channel. This "News Reader" channel may provide,

for example, specific news that is sortable by sales account, by location, and/or by any other important attributes. This "News Reader" channel may provide company division-, group- and/or account-specific news, external reports or internal intelligence insights on client events in the news.

[00282] "myNet" touchlet 316P of channel grid 318b may be associated with a "myNet" channel, such as, but not limited to, the "myNet" channel 5600 of Figure 56. For example, the "myNet" channel 5600 may provide a compilation of company, division, group and/or account-specific social sites (e.g., divisions of and/or groups within PQR Corporation). The "myNet" channel 5600 may provide simple tools to enable posting of a comment to multiple forums. The "myNet" channel 5600 may also provide the capability to set alerts (e.g., monitoring channel information for London office AND management change) to users.

[00283] "Real-time Profit & Loss" touchlet 316Q of channel grid 318b may be associated with a "Real-time Profit & Loss" channel (not shown) that is company division- and/or group-specific. For example, the "Real-time Profit & Loss" channel may be used to create a composite of actual performance, adjusted for currency, indicating net margin contribution in real time.

[00284] "Account Bookings" touchlet 316R of channel grid 318b may be associated with a "Account Bookings" channel (not shown). For example, the "Account Bookings" channel may be a company division-, group- and/or account-specific channel that provides composite sales bookings by category, such as hardware, software, and/or services. This "Account Bookings" channel may provide timelines of booking to shipment to payment. This "Account Bookings" channel may also be merged and/or combined with the "Currency Converter" channel to analyze net booking margin – alerts may be set to thresholds.

[00285] "Sales Pipeline" touchlet 316S of channel grid 318b may be associated with a "Sales Pipeline" channel, such as, but not limited to, a "Sales Pipeline" channel 5700 of Figure 57. For example, the "Sales Pipeline" channel may provide a forecast of total account revenue by month, probability, and category, such as hardware, software, and/or services. The "Sales Pipeline" channel may provide a mean to interrogate sales pipeline information, for example, if a user wanted to understand the

composition of the hardware pipeline, an interrogation might launch the "Account Bookings" channel.

[00286] "Personnel Locator" touchlet 316T of channel grid 318b may be associated with a "Personnel Locator" channel (not shown). For example, the "Personnel Locator" channel may provide an account team and client locator function. That is, the "Personnel Locator" channel may provide a look-up utility for all company personnel associated with the client, with pictures and groupings. Additional information may also include assigned activities, deal prospects, current location, and the like. The "Personnel Locator" channel may provide a similar utility for client contacts with links to company counterparts. The "Personnel Locator" channel may provide the capability to link names and activate messaging services, such as email, SMS, and the like.

[00287] "Channel Catalog" touchlet 316U of channel grid 318b may be associated with a channel application catalog, such as, but not limited to, channel application catalog 631 of Figure 12, channel application catalog 6500 of Figure 65, and channel application catalog 6700 of Figure 67. Again, the channel application catalog is accessed to download certain channel grids and/or channels.

[00288] "Open Room" touchlet 316V of channel grid 318b may be associated with an "Open Room" channel, such as, but not limited to, an "Open Room" channel 5800 of Figure 58. For example, the "Open Room" channel may provide a mechanism for real-time collaboration and video conferencing. The "Open Room" channel may provide direct access to initiate a conference and provide relevant content. The "Open Room" channel may provide access to other channels to begin collaboration. For example, the "Open Room" channel may provide assess to the "Sales Pipeline" channel or "Personal Calendar" channel to help facilitate collaboration.

[00289] "Security Threat Trends" touchlet 316W of channel grid 318b may be associated with a "Security Threat Trends" channel, such as, but not limited to, a "Security Threat Trends" channel 5900 of Figures 59, 60, and 61. For example, the "Security Threat Trends" channel may provide company intelligence service tools on security threats to the company, such as attempts to circumvent firewalls or unauthorized entry into a building facility. The "Security Threat Trends" channel may include an advanced set of utilities to set alerts relating to threats facing the

company. The "Security Threat Trends" channel may be linked to, combined with, and/or merged into other channels, such as a "News Reader" channel to provide external information relating to threats facing the company including, for example, fire and power outage information.

[00290] "Room Finder" touchlet 316X of channel grid 318b may be associated with a "Room Finder" channel (not shown). For example, the "Room Finder" channel may provide a utility to input a sales meeting location or company campus location and find a meeting room. The "Room Finder" channel may include an access-enabled room scheduling tool to set up meetings or launch "Just-In-Time" workspace software applications that may be used to schedule meeting space appropriate for the requestor (e.g., by identity/level) and may send notification to others. The "Room Finder" channel may be used to generate a visual and/or audible map to the room location using the geo-location capability of, for example, the user's client device, such as their cell phone.

[00291] Referring to Figure 55, screenshots of certain components of an example of a "Personal Calendar" channel 5500 that is suitable for use in enterprise applications is presented. Figure 55 shows "Personal Calendar" channel 5500 operating in a substantially full-screen mode. A "Personal Calendar" touchlet 316B is provided for presenting dynamic information of, interacting with, and/or launching "Personal Calendar" channel 5500. The "Personal Calendar" channel may, for example, provide a listing of the user's commitments, meetings, and the like. "Personal Calendar" channel may use active alerts to notify the user of upcoming events.

[00292] Main viewing panel 410 of "Personal Calendar" channel 5500 may include, for example, a daily view window 5512 and a monthly view window 5514. The daily view window 5512 may display, for example, a list of today's events. The monthly view window 5514 may display, for example, a full month's events in standard calendar form. Main viewing panel 410 of "Personal Calendar" channel 5500 may also include certain control buttons, such as, but not limited to, an "Events" button, a "Mail" button, an "Address Book" button, and a "Subscribe" button.

[00293] Referring to Figure 56, screenshots of certain components of an example of "myNet" channel 5600 that is suitable for use in enterprise applications is

presented. Figure 56 shows "myNet" channel 5600 operating in a substantially full-screen mode. A "myNet" touchlet 316P is provided for presenting dynamic information of, interacting with, and/or launching "myNet" channel 5600. The "myNet" channel 5600 may provide a compilation of certain social sites (e.g., company-specific, division-specific, group-specific, and/or account-specific social sites). The "myNet" channel 5600 may provide simple tools to enable posting of a commentary to multiple forums. The "myNet" channel 5600 may also provide the capability to send a variety of alert types, such as text driven alerts.

[00294] Main viewing panel 410 of "myNet" channel 5600 may include, for example, a friends window 5612 and a latest updates window 5614. The friends window 5612 may display, for example, a list of the contacts as well as their online status. The latest updates window 5614 may display, for example, one or more forums for posting comments. For example, latest updates window 5614 may include a Facebook session, a Twitter session, and a chronological log of the user's activities.

[00295] Referring to Figure 57, screenshots of certain components of an example of "Sales Pipeline" channel 5700 that is suitable for use in enterprise applications is presented. Figure 57 shows "Sales Pipeline" channel 5700 operating in a substantially full-screen mode. A "Sales Pipeline" touchlet 316S is provided for presenting dynamic information of, interacting with, and/or launching "Sales Pipeline" channel 5700. The "Sales Pipeline" channel may provide a forecast of total account revenue by month, probability, and category, such as hardware, software, and/or services. In addition, other sales metrics maybe tracked. For example, total sales opportunity, total proposals, and total contracts may be tracked. In interacting with the "Sales Pipeline" channel the user may interrogate various forecasts and metrics to obtain more information and context about the information. For example, in interrogating the sales contracts metrics the "Account Bookings" channel may be launched, combined, and/or merged with the "Sales Pipeline" channel in order to allow the user to understand exactly what accounts have booked contracts.

[00296] Main viewing panel 410 of "Sales Pipeline" channel 5700 may include, for example, a selection window 5712 and a sales forecast window 5714. The selection window 5712 allows the user to select any month of the year. Once the user selects a certain month, the selected month's sales forecast information is displayed in sales

forecast window 5714. Main viewing panel 410 of "Sales Pipeline" channel 5700 may also include certain control buttons, such as, but not limited to, a "Settings" button, as well as a search tool.

[00297] Referring to Figure 58, screenshots of certain components of an example of an "Open Room" channel 5800 that is suitable for use in enterprise applications is presented. Figure 58 shows "Open Room" channel 5800 operating in a substantially full-screen mode. An "Open Room" touchlet 316V is provided for presenting dynamic information of, interacting with, and/or launching "Open Room" channel 5800. "Open Room" channel 5800 provides a video and/or audio conferencing service to users 116.

[00298] Main viewing panel 410 of "Open Room" channel 5800 may include, for example, an attendees window 5812 and a video feed window 5814. The attendees window 5812 displays a list of any attendees that have joined the video conference and a chat feature. The video feed window 5814 displays streaming video or periodic camera shots of any attendees that have joined the video conference. Main viewing panel 410 of "Open Room" channel 5800 may also include certain control buttons for, for example, sharing documents, passing control of the video conference, and the like. Mini-touchlets 416 may include touchlets that are specifically relevant to the video conference and/or mini-touchlets that help aid collaboration of the team members. For example, a certain "Open Room" mini-touchlet 416 may be used to book a meeting room for the next team meeting. Mini-touchlets 416 may include touchlets that provide information relevant to the meeting topic. In providing information relevant to the meeting, the "Personal Calendar" channel of the meeting organizer may be interrogated to determine the subject of the meeting. If, for example, the meeting is a monthly sales meeting, one mini-touchlet 416 may be a "Sales Pipeline" mini-touchlet.

[00299] Referring to Figures 59, 60, and 61, screenshots of certain components of an example of the "Security Threat Trends" channel 5900 that is suitable for use in enterprise applications is presented. Figures 59, 60, and 61 show "Security Threat Trends" channel 5900 operating in a substantially full-screen mode. A "Security Threat Trends" touchlet 316W is provided for presenting dynamic information of, interacting with, and/or launching "Security Threat Trends" channel 5900. The

"Security Threat Trends" channel may provide company intelligence on threats facing the company from internal and external sources. For example threats to computer network security.

[00300] Main viewing panel 410 of "Security Threat Trends" channel 5900 may include, for example, a data window 5912 and a trends window 5914. The data window 5912 displays, for example, certain information about company host computer resources. Trends window 5914 includes, for example, three tabs: a "Threat Management Trend" tab, a "Vulnerability Exposure Trend" tab, and a "Security Intelligence Trend" tab. Figure 59 shows information corresponding to the "Threat Management Trend" tab. Figure 60 shows information corresponding to the "Vulnerability Exposure Trend" tab. Figure 61 shows information corresponding to the "Security Intelligence Trend" tab. Main viewing panel 410 of "Security Threat Trends" channel 5900 may also include certain control buttons, such as, but not limited to, a "Settings" button, as well as a search tool.

**[00301]** Referring to Figure 62, a block diagram of an example of an enterprise user hierarchy 6200 is presented that shows individual users, roles assigned to users, and/or users assigned to groups within an enterprise. The implementation of individual users, roles, and/or groups in information delivery system 100 is not limited to enterprise applications only. Individual users, roles, and/or groups are likewise applicable to consumer applications.

[00302] Users 116 in, for example, a corporate environment may be assigned to groups based, for example, on their titles, positions, levels, and/or authority in a company. Users 116 may then be assigned roles within their assigned group.

**[00303]** In one example, enterprise user hierarchy 6200 includes one or more users 116 that are assigned to a directors group 6210. In this example, each user 116 may have the title of director within the enterprise. However, among the users 116 in the directors group 6210, a certain user 116 (i.e., director) in the directors group 6210 may have the role of "System Administrator," while another user 116 in the directors group 6210 may have the role of "Emergency Coordinator."

[00304] In another example, enterprise user hierarchy 6200 includes one or more users 116 that are assigned to a managers group 6212. In this example, each user 116

may have the title of manager within the enterprise. However, among the users 116 in the managers group 6212, a certain user 116 (i.e., manager) in the managers group 6212 may have the role of "Performance Appraiser," while another user 116 in the managers group 6212 may have the role of "Threat Case Manager."

[00305] In yet another example, enterprise user hierarchy 6200 includes one or more users 116 that are assigned to an analysts group 6214. In this example, each user 116 may have the title of analyst within the enterprise. However, among the users 116 in the analysts group 6214, a certain user 116 (i.e., analyst) in the analysts group 6214 may have the role of "Senior Analyst," while another user 116 in the analysts group 6214 may have the role of "Associate Analyst."

[00306] Outside of the aforementioned groups and/or roles, enterprise user hierarchy 6200 may also include one or more individuals 6216, which may be any users 116 that are not necessarily assigned to a group. While not assigned to a group, each individual 6216 may be assigned a role based on their title, position, level, and/or authority in the company. For example, one individual 6216 may be the company CEO, which is his/her assigned role. Another individual 6216 may be the company CFO, which is his/her assigned role.

[00307] The content that is available to any user 116 may be group- and/or role-dependent. That is, the authorizations and/or permissions with respect to accessing and/or using channels, channel grids, and/or with respect content presented by the channels and/or channel grids may be dependent on the user's group and/or role within the enterprise. By way of example, let's apply enterprise user hierarchy 6200 of Figure 62 to an information security enterprise, such as, but not limited to, corporate security office that is responsible for safeguarding sensitive corporate information. In one example, the process of safeguarding sensitive information may include an insider threat avoidance system that is implemented using information delivery system 100. In this example, in order to detect and prevent any breach of information security, information delivery system 100 is used to monitor employee (or any insider, such as a contractor, supplier, regulator, and/or project manager) activity with respect to unauthorized access, use, disclosure, disruption, modification, perusal, inspection, recording, or destruction of sensitive information. If a potential

threat is indentified, a case may be opened to manage the investigation of the threat using "Security Threat Trends" channel 5900.

[00308] In the example of the information security enterprise, users 116 (i.e., directors) in the directors group 6210 may have the highest authorization level with respect to access and/or use of certain channels and/or content and/or with respect to permissions to perform certain actions. That is, users 116 (i.e., directors) in the directors group 6210 have full authority to perform any task and/or function. For example, a particular user 116 (i.e., director) in the directors group 6210 may have the role of "System Administrator," who has the authority to add, update, and delete users 116 and/or cases from the insider threat avoidance system, which is implemented using information delivery system 100. Under the control of the "System Administrator" the authorization status of individuals 6216 may be assigned uniquely depending upon their respective roles in the enterprise (e.g., CEO, CFO, etc).

**[00309]** In the information security enterprise, users 116 (i.e., managers) in the managers group 6212 may have medium level authorization with respect to access and/or use of certain channels and/or content and/or with respect to permissions to perform certain actions. Generally, users 116 in the managers group 6212 have create, update, and read authority; and also have business process control. For example, a particular user 116 (i.e., manager) in the managers group 6212 may have the role of "Threat Case Manager," who has the authority to create a case, view a case, update a case, and perform an approval step, which may promote the case to the next step in the workflow. However, the role of "Threat Case Manager" in the managers group 6212 does not allow adding and deleting users and/or cases.

[00310] In the information security enterprise, users 116 (i.e., analysts) in the analysts group 6214 may have the lowest level authorization with respect to access and/or use of certain channels and/or content and/or with respect to permissions to perform certain action. For example, a particular user 116 (i.e., analyst) in the analysts group 6214 may have the role of "Senior Analyst," who has the authority to create a case, view a case, and update a case. However, the role of "Senior Analyst" in the analysts group 6214 does not allow business process control. For example, the "Senior Analyst" in the analysts group 6214 may not perform the approval step and promote the case to the next step in the workflow.

[00311] Examples of group- and/or role-dependent content and/or actions with respect to an insider threat avoidance system, which is implemented using information delivery system 100, are described with reference to Figures 63 through 72.

[00312] Referring to Figure 63, a screenshot of an analyst client GUI 6300 is presented that includes an example of a channel grid for users 116 (i.e., analysts) in the analysts group 6214 of the enterprise. For example, when an analyst logs into the system, a channel grid 318c is displayed on the user device 118 of the analyst. The content of channel grid 318c is role-specific with respect to users 116 (i.e., analysts) in the analysts group 6214. In this example, channel grid 318c includes three touchlets 316 for which analysts are authorized. For example, channel grid 318c includes an "Alerts" touchlet 316A, a "Personnel Activity" touchlet 316B, and a "Reports" touchlet 316C.

[00313] "Alerts" touchlet 316A of channel grid 318c may be associated with an "Alerts" channel, such as, but not limited to, an "Alerts" channel 6800 of Figure 68. For example, the "Alerts" channel allows authorized analysts, managers, and/or directors to be alerted to and/or view new cases for individuals who may have performed potentially suspicious activities.

[00314] "Personnel Activity" touchlet 316B of channel grid 318c may be associated with a "Personnel Activity" channel, such as, but not limited to, a "Personnel Activity" channel 6900 of Figure 69. For example, the "Personnel Activity" channel allows authorized analysts, managers, and/or directors to view activities of personnel inside the enterprise and investigate their activities in relation to the alert and case.

[00315] "Reports" touchlet 316C of channel grid 318c may be associated with a "Reports" channel, such as, but not limited to, a "Reports" channel 7000 of Figure 70. For example, the "Reports" channel allows authorized analysts, managers, and/or directors to generate analytics reports on specific activities data. The "Reports" channel may access, merge, and/or combine with the "Personnel Activity" channel to facilitate the production of a report. For example the "Personnel Activity" channel may provide a computer log of a user's system activity that may be included in the analytics section of a report.

[00316] Referring to Figure 64, a screenshot of a manager client GUI 6400 is presented that includes an example of a channel grid for users 116 (i.e., managers) in the managers group 6212 of the enterprise. For example, when a manager logs into the system, a channel grid 318d is displayed on the user device 118 of the manager. The content of channel grid 318d is role-specific with respect to users 116 (i.e., managers) in the managers group 6212. In this example, channel grid 318d includes four touchlets 316 for which managers are authorized. For example, channel grid 318d includes the "Alerts" touchlet 316A, "Personnel Activity" touchlet 316B, and "Reports" touchlet 316C that are described in Figure 63 with respect to analysts. However, managers are further authorized to receive a "Catalog" touchlet 316D. Whereas analysts are not authorized to receive "Catalog" touchlet 316D (see channel grid 318c of Figure 63).

[00317] "Catalog" touchlet 316D of channel grid 318d may be associated with a channel application catalog, such as, but not limited to, a channel application catalog 6500 of Figure 65. The channel application catalog allows users to configure the channels that are displayed on their channel grids. Referring to Figure 65, a screenshot of an example of the channel application catalog 6500 is presented that includes content that corresponds to users 116 (i.e., managers) in the managers group 6212 of the enterprise. In this example, the content of channel application catalog 6500 is role-specific with respect to managers. That is, only channels for which managers are authorized are available in channel application catalog 6500. In this example, shown in a channel catalog window 6512, managers are authorized to receive the "Alerts" channel, "Personnel Activity" channel, "Reports" channel, and additional manager level channels from "Catalog" channel.

[00318] Referring to Figure 66, a screenshot of a director client GUI 6600 is presented that includes an example of a channel grid for users 116 (i.e., directors) in the directors group 6210 of the enterprise. For example, when a director logs into the system, a channel grid 318e is displayed on the user device 118 of the director. The content of channel grid 318e is role-specific with respect to users 116 (i.e., directors) in the directors group 6210. In this example, channel grid 318e includes six touchlets 316 for which directors are authorized. For example, channel grid 318e includes the "Alerts" touchlet 316A, "Personnel Activity" touchlet 316B, and "Reports" touchlet

316C that are described in Figure 63 with respect to analysts. Channel grid 318e also includes the "Catalog" touchlet 316D that is described in Figure 64 with respect to managers. However, directors are further authorized to receive a "User Administration" touchlet 316E and a "Catalog Administration" touchlet 316F. Whereas analysts and managers are not authorized to receive "User Administration" touchlet 316E and "Catalog Administration" touchlet 316F (see channel grid 318c of Figure 63 and channel grid 318d of Figure 64).

[00319] "User Administration" touchlet 316E of channel grid 318e may be associated with a "User Administration" channel, such as, but not limited to, a "User Administration" channel 7100 of Figure 71. For example, a particular user 116 (i.e., director) in the directors group 6210 may have the role of "System Administrator," who has the authority to set roles and groups for the system users.

[00320] "Catalog Administration" touchlet 316F of channel grid 318e may be associated with a "Catalog Administration" channel, such as, but not limited to, a "Catalog Administration" channel 7200 of Figure 72. For example, the "Catalog Administration" channel allows the "System Administrator" to manage the catalog content as it relates to roles and groups of the system users.

[00321] Referring to Figure 67, a screenshot of an example of a channel application catalog 6700 is presented that includes content that corresponds to users 116 (i.e., directors) in the directors group 6210 of the enterprise. In this example, the content of channel application catalog 6700 is role-specific with respect to directors. That is, only channels for which directors are authorized are available in channel application catalog 6700. In this example, shown in a channel catalog window 6712, directors are authorized to receive the "Alerts" channel, "Personnel Activity" channel, "Reports" channel, "Catalog" channel, "User Administration" channel, and "Catalog Administration" channel.

[00322] Referring to Figure 68, screenshots of certain components of an example of the "Alerts" channel 6800 that is suitable for use in enterprise applications is presented. Figure 68 shows "Alerts" channel 6800 operating in a substantially full-screen mode. An "Alerts" touchlet 316A is provided for presenting dynamic information of, interacting with, and/or launching "Alerts" channel 6800. The "Alerts" channel 6800 allows authorized users to view new cases for individuals who

have performed potentially suspicious activities. Certain advanced information products that provide analytic capabilities may be operating behind "Alerts" channel 6800 for flagging individuals who may be performing potentially suspicious activities. The data upon which analysis is performed may be obtained from legacy applications, such as, but not limited to, HRM, ERP, PLM, CRM systems and tools, any other management tools, and the like. For example, if a threat was detected concerning theft of customer information, the CRM legacy application may provide information to investigate the theft.

[00323] Main viewing panel 410 of "Alerts" channel 6800 may include, for example, an alerts window 6812 and an alerts detail window 6814. The alerts window 6812 displays a list of potential alerts to potentially be investigated. Once the user selects a certain alert at alerts window 6812, the details of the selected alert are displayed in alerts detail window 6814. Main viewing panel 410 of "Alerts" channel 6800 may also include certain control buttons, such as, but not limited to, a "Delete" button and an "Add New" button. An "Approved" dropdown menu may also be provided.

[00324] Referring to Figure 69, screenshots of certain components of an example of the "Personnel Activity" channel 6900 that is suitable for use in enterprise applications is presented. Figure 69 shows "Personnel Activity" channel 6900 operating in a substantially full-screen mode. A "Personnel Activity" touchlet 316B is provided for presenting dynamic information of, interacting with, and/or launching "Personnel Activity" channel 6900. The "Personnel Activity" channel 6900 allows authorized users to view activities of personnel inside the enterprise.

[00325] Main viewing panel 410 of "Personnel Activity" channel 6900 may include, for example, a personnel activity window 6912 and an activity details window 6914. The personnel activity window 6912 displays a list of personnel activities to potentially be investigated. Once the user selects a certain activity at personnel activity window 6912, the details of the selected activity is displayed in activity details window 6914. Main viewing panel 410 of "Personnel Activity" channel 6900 may also include an "Analyzing" dropdown menu. The activities data from which analysis is performed may be obtained from legacy applications, such as,

but not limited to, HRM, ERP, PLM, CRM systems and tools, any other management tools, and the like.

[00326] Referring to Figure 70, screenshots of certain components of an example of a "Reports" channel 7000 that is suitable for use in enterprise applications is presented. Figure 70 shows "Reports" channel 7000 operating in a substantially full-screen mode. A "Reports" touchlet 316C is provided for presenting dynamic information of, interacting with, and/or launching "Reports" channel 7000. The "Reports" channel 7000 allows authorized users to generate analytics reports on specific activities data.

[00327] Main viewing panel 410 of "Reports" channel 7000 may include, for example, a report types window 7012 and an activities window 7014. The report types window 7012 displays a list of different types of reports. Once the user selects a certain report type at report types window 7012, the activities related to the selected report type are displayed in activities window 7014.

[00328] Referring to Figure 71, screenshots of certain components of an example of the "User Administration" channel 7100 that is suitable for use in enterprise applications is presented. Figure 71 shows "User Administration" channel 7100 operating in a substantially full-screen mode. A "User Administration" touchlet 316E is provided for presenting dynamic information of, interacting with, and/or launching "User Administration" channel 7100. The "User Administration" channel 7100 allows, for example, the "System Administrator" of the directors group 6210 to set roles and groups for the system users.

[00329] Main viewing panel 410 of "User Administration" channel 7100 may include, for example, a user details window 7112. The user details window 7112 provides one or more information entry fields by which the "System Administrator" may enter information about a certain user 116 in a certain group. For example, user details window 7112 may be used to set the group and/or role of a certain user 116. Predetermined groups and/or roles may have certain permissions and/or parameters already defined.

[00330] Referring to Figure 72, screenshots of certain components of an example of a "Catalog Administration" channel 7200 that is suitable for use in enterprise

applications is presented. Figure 72 shows "Catalog Administration" channel 7200 operating in a substantially full-screen mode. A "Catalog Administration" touchlet 316F is provided for presenting dynamic information of, interacting with, and/or launching "Catalog Administration" channel 7200. The "Catalog Administration" channel 7200 allows the "System Administrator" in the directors group 6210 to manage the catalog content as it relates to roles and groups of the system users.

[00331] Main viewing panel 410 of "Catalog Administration" channel 7200 may include, for example, a channel details window 7212. The channel details window 7212 provides one or more information entry fields by which, for example, the "System Administrator" in the directors group 6210 may enter information about a certain channel applications, such as, but not limited to, "Alerts" channel 6800, "Personnel Activity" channel 6900, "Reports" channel 7000, and "User Administration" channel 7100. Additionally, channel details window 7212 may be used to manage the catalog content as it relates to roles and groups of the system users. For example, channel details window 7212 may be used to set "User Administration" channel 7100 to be used by the "System Administrator" in the directors group 6210, but not by users 116 in the managers group 6212 and users 116 in the analysts group 6214.

[00332] Referring again to Figures 52 through 72, while non-limiting examples of channels 200 that may be suitable for enterprise use have been described largely in the context of processing and presenting role-based content, the present invention is not limited to role-based content only. Information delivery system 100 may be used to process and present role-based content, location-based content, time-based content, activity-based content, behavior-based content, and any combinations thereof. That is, information delivery system 100 provides the framework by which a developer can create any useful information products, such as role-based product, location-based products, time-based products, activity-based products, behavior-based products, and any combinations thereof. Again, bringing to the user the information and experience that is most important to them.

[00333] Additionally, information delivery system 100 may be used to push scheduled events to users 116. For example, in the enterprise environment, a notification may be sent to users 116 that it is time for their annual training session.

Similarly, information delivery system 100 may push information to users 116 about any corporate activity, event, or news.

## [00334] SYSTEM ARCHITECTURE SUPPORTING A WEB PRESENTATION FRAMEWORK

[00335] For the purpose of illustration, Figures 73 through 78 describe the system architecture of information delivery system 100 of the present invention implemented for supporting a web presentation framework. In one example, the web presentation framework is implemented using HTML5. HTML5 is a language for structuring and presenting content for the World Wide Web, a core technology of the Internet. It is the latest revision of the HTML standard and currently remains under development. Its core aims have been to improve the language with support for the latest multimedia while keeping it easily readable by humans and consistently understood by computers and devices (e.g., web browsers, parsers, etc.). As compared to previous versions, HTML5 adds many new syntactical features. These include the <video>, <audio>, and <canvas> elements (or tags), as well as the integration of Scalable Vector Graphics (SVG) content. These features are designed to make it easy to include and handle multimedia and graphical content on the web. Additionally, HTML5 provides support for off-line storage. Further, HTML5 includes a new protocol called WebSockets that allows bidirectional asynchronous communication.

[00336] Referring to Figure 73, a functional block diagram of an example of a PID application architecture 7300 for supporting the web presentation framework is presented. PID application architecture 7300 is another example of the application architecture of the server side of PID application 112. In this example, the user devices 118 that are used with the Flex presentation framework of PID application architecture 600 of Figure 6 are replaced by user devices 7310. That is, instead of supporting Adobe AIR-enabled devices, PID application architecture 7300 supports user devices 7310, which may be any web (or Internet) browser-enabled devices (hereafter called browser-enabled devices). For example, Figure 73 shows a web browser 7312 running on each user device 7310. Examples of web (or Internet) browsers that may be running on user devices 7310 may include, but are not limited to, Microsoft Internet Explorer® 9, Google Chrome, Mozilla Firefox 4, Apple Safari 5, and Opera 11.

[00337] Accordingly, examples of user devices 7310 may include, but are not limited to, any type, brand, and/or model of browser-enabled desktop computer; browser-enabled laptop computer; browser-enabled tablet computer; browser-enabled net-book computing device; browser-enabled handheld computing device; browser-enabled personal digital assistant; browser-enabled enterprise digital assistant; browser-enabled portable digital assistant; browser-enabled telecommunications device including one of an browser-enabled telephone, browser-enabled cell phone, and browser-enabled smart phone; browser-enabled personal navigation device; browser-enabled vehicle-based device; browser-enabled optical disk player; browser-enabled television; browser-enabled game console; and the like.

[00338] PID application architecture 7300 may include facilitation layer 610, integration and process layer 612, and integrated services and applications layer 614 of PID application architecture 600 of Figure 6, albeit with certain modifications for supporting the web presentation framework.

[00339] For example, facilitation layer 610 includes the facilitation server 616 and the certain other servers 628, such as, but not limited to, channel server 630, content delivery server 632, collaboration media server 634, stream sync server 636, analytics server 638, advertising server 640, transcoding server 642, and media server 644. However, in this embodiment, facilitation server 616 includes a client gateway 7314 instead of the client gateway 618 of PID application architecture 600 of Figure 6. Client gateway 7314 uses hypertext transfer protocol (HTTP) for communicating with the client (e.g., web browsers 7312 of user devices 7310), while using, for example, JMS protocol for communicating with the rest of the server stack. In this way, facilitation server 616 may serve as an HTTP server. Preferably, client gateway 7314 of facilitation server 616 uses HTTPS protocol, which is HTTP Secure protocol.

[00340] While facilitation server 616 manages certain communication between the client (e.g., web browsers 7312 of user devices 7310) and the server (e.g., application server 110), the use of HTTP may be have certain limitations. For example, under HTTP protocol, a client, such as a web browser, must open a connection to a server, make a request, wait for a response, and then close the connection. If the client needs more data, it must open a new connection. Likewise, if the server has new information for the client, it must wait until the client requests it rather than sending it

over instantly. Consequently, HTTP protocol may be an inefficient way to exchange data. However, HTML5 includes a new protocol called WebSockets. This protocol allows a web client to create a connection, keep it open as long as it wants, and both send and receive data continuously. WebSocket connections allow two-way communication between the client (e.g., web browsers 7312 of user devices 7310) and the server without having to use Ajax type of mechanisms, thereby providing an efficient way to exchange data.

[00341] Therefore, facilitation layer 610 of PID application architecture 7300 also includes a messaging server 7316, which uses the WebSocket technology. That is, messaging server 7316 uses WebSocket protocol for communicating with the client (e.g., web browsers 7312 of user devices 7310), while using, for example, JMS protocol for communicating with the rest of the server stack. Preferably, messaging server 7316 uses WSS protocol, which is WebSocket Secure protocol. The WSS protocol enables bidirectional message-calling capability between the browser and messaging server 7316. The WSS protocol provides the path to the enterprise service bus 680 of integration and process server 646. The messages from the client (e.g., web browsers 7312) are converted from HTTP protocol to JMS protocol. The WSS protocol rejects connections that have not been authenticated (i.e., needs a token that indicates authentication). As a result, PID application architecture 7300 uses the combination of messaging server 7316 and facilitation server 616 to manage communication between the client (e.g., web browsers 7312 of user devices 7310) and the server (e.g., application server 110).

[00342] Additionally, the relational database management system (RDBMS) 686 of integrated services and applications layer 614 of PID application architecture 7300 may include a schema-less database 7318. Schema-less database 7318 is in communication with data management subsystem 650 of integration and process layer 612 via enterprise service bus 680 and adaptors 682. A RDBMS imposes a fixed schema, while a schema-less database does not. A main advantage of a schema-less database (e.g., a NoSQL database) compared with a relational database (e.g., a SQL database) is that it is easily scalable. A schema-less database is well-suited for the web presentation framework of PID application architecture 7300 because it provides a convenient database for channel/content developers. In one example, schema-less

database 7318 may be the MongoDB available from 10gen, Inc (New York, NY). MongoDB is an open source, high performance, scalable, document-oriented database.

[00343] Referring to Figure 74, a functional block diagram of an example of client architecture 7400 of PID application 112 for supporting the web presentation framework is presented. Client architecture 7400 is another example of the application architecture of the client side of PID application 112. In this example, client architecture 7400 may include an integrated development environment (IDE) layer 7410, a runtime layer 7412, an application layer 7414, and a themes layer 7416.

[00344] IDE layer 7410 is the layer of client architecture 7400 in which developers may develop channels and/or content of PID application 112 for running in the web presentation framework. There may be a channel IDE local component, a channel IDE client component, and a channel IDE server component. Developers may use writing panels, creating panels, developing panels, views, code, and the like when developing channels and/or content.

[00345] Runtime layer 7412 provides the engine for processing the channels and/or content that is created using the IDE layer 7410. There may be a channel runtime local component, a channel runtime client component, and a channel runtime server component. There may be, for example, document object model (DOM) views in runtime layer 7412. A DOM view provides the hierarchy of a web page. With respect to the channel runtime local component and the channel IDE local component, when creating channels and/or content for information delivery system 100, a developer may, optionally, have a local copy of certain components of the server loaded and executing on his/her user device 7310. This simply provides convenience to the developer to not have to continuously access, for example, the server-side portion of PID application 112 at application server 110 when creating channels and/or content.

[00346] Application layer 7414 contains the rules for the look and feel of the PID application 112 in the browser. For example, application layer 7414 contains the rules for displaying the channel grid that contains touchlets, a taskbar, a navigation bar, and the like. Application layer 7414 processes the raw application data and organizes the data into a complete application picture for the user.

[00347] Themes layer 7416 transforms the raw application data into the actual GUI presentation in the browser to the user. For example, a theme may be a company-based theme. In one example, the theme may be the XYZ Corporation theme.

[00348] Using the web presentation framework of PID application architecture 7300 and/or client architecture 7400, a user 116 may access PID application 112 of information delivery system 100 by launching the web browser 7312 on his/her user device 7310. Then the user 116 may enter the URL address of PID application 112 (e.g., <a href="http://www.PIDapplication.com/">http://www.PIDapplication.com/</a>) and perform a login process. That is, by entering the URL address of PID application 112, the user 116 is connected via HTTP to facilitation server 616, which is the HTTP server. The user 116 then enters a username and password in a login window that is presented in web browser 7312 of his/her user device 7310. During the login process, the user may be asked whether using a public or private computer. If a public computer, no information is cached on the computer. That is, once the browser is closed, no trace of the user's activity is left behind on the computer.

[00349] Once authenticated, a session begins and the user 116 may access the resources of the rest of the server stack. Web browser 7312 connects to messaging server 7316 via WSS protocol and bidirectional communication begins. Based on user identity, a certain channel grid and/or channel application is retrieved and launched in the web browser 7312 on his/her user device 7310. For example, configuration server 654 accesses the schema-less database 7318 for user configuration and preference information with regard to the user's grid, and any other information needed to render the grid. This information is passed back to the client and the grid is rendered at the web browser 7312.

**[00350]** Subsequently, the user 116 may access one or more channel grids to which he/she is authorized to use. The user may select a certain touchlet of a certain channel grid in web browser 7312 and interact with a certain channel within the environment of the web browser 7312. Examples of channel grids, touchlets, and/or channels that are operating in web browser 7312 per the web presentation framework are shown with reference to Figures 75 through 78.

[00351] Additionally, dynamic updates may occur. For example, there may be circumstance where the user's grid is updated. That is, the user himself makes a

change, or some other user modifies a shared grid (e.g., adds a channel). In this example, the schema-less database 7318 may be updated with the change and the change is then pushed to the user who is running the grid in their web browser 7312. Additionally, if someone updates configuration preferences in integration and process server 646, the schema-less database 7318 is updated and the changes are also pushed to other clients that are subscribed to be notified of these changes. Changes are routed through JMS (a publish/subscribe mechanism) through facilitation server 616, which is the HTTP server, to the web browser 7312. Then, the web browser 7312 refreshes to implement the changes. In one example, if a user 116 no longer has access to certain content, that user 116 is immediately blocked from the content. In another example, if a new touchlet has been added to a channel grid, a new touchlet immediately appears on the grid in the user's web browser 7312.

[00352] In another example of performing dynamic updates, a "Stock Watch" channel (e.g., a "Stock Watch" channel 7800 of Figure 78) uses dynamic updates to periodically push stock content to the "Stock Watch" channel at the web browser 7312. When first launched, an initial request is made for current stock data through messaging server 7316 via WSS protocol, and then via JMS protocol to the integration and process server 646, and then to the external data sources. The current stock data that has been archived in the schema-less database 7318 is transmitted back to the web browser 7312 and displayed. The integration and process server 646 is not passive, it polls the external feeds for updates, stores the latest data in the schema-less database 7318, and pushes the updates back to the subscribing clients. The updates are also published to the eventing and alerting subsystem 652 and analyzed with respect to certain events that have been set up and that are being monitored. If certain conditions are met, alert notifications are triggered.

[00353] Referring to Figure 75, a screenshot of an example of a web browser 7312, which is running on a user device 7310, is presented for displaying a web page of a channel grid to the user. In this example, web browser 7312 may be a Microsoft Internet Explorer® web browser, but may be any type of browser, such as, but not limited to, a Google Chrome, Firefox, Safari, or Opera web browser. The web page that is displayed in web browser 7312 shows, for example, a channel grid 7510 that includes one or more touchlets 7512. The web page in web browser 7312 also shows

a set of one or more channel grid buttons 7514 for selecting a certain channel grid to be displayed in web browser 7312. In one example, channel grid buttons 7514 may include an "At Home" channel grid button, a "My TV" channel grid button, an "At Work" channel grid button, a "Catalog" channel grid button, and a "Developer" channel grid button. In one example, when a user selects a certain channel grid button 7514, the corresponding channel grid web page is displayed in web browser 7312. The set of touchlets 7512 shown in channel grid 7510 of web browser 7312 of Figure 75 is an example of the touchlets of the user's "At Home" channel grid, meaning the channel grid that the user is likely to use when at home. When the user 116 selects a certain touchlet 7512, the web browser 7312 is updated (i.e., refreshed) with the corresponding channel application web page.

[00354] In this example, channel grid 7510 of Figure 75 (i.e., the user's "At Home" channel grid) includes, for example, one or more television media touchlets, such as a "Fringe" touchlet 7512A, a "Lost" touchlet 7512B, a "MasterChef" touchlet 7512C, and a "So You Think You Can Dance" touchlet 7512D; one or more movie media touchlets, such as an "Avatar" touchlet 7512E, a "How To Train Your Dragon" touchlet 7512F, and a "NetFlix" touchlet 7512G; and one or more other channel application touchlets, such as an "Advertising" touchlet 7512H, a "Last Viewed" touchlet 7512I, a "Remote Care" touchlet 7512J, a "My Medicine Cabinet" touchlet 7512K, and a "Home Security" touchlet 7512L. Each touchlet 7512 is associated with its corresponding channel application. More details of an example of a "Home Security" channel that is associated with "Home Security" touchlet 7512L and that is operating in the web presentation framework are described with reference to Figure 76.

[00355] Referring to Figure 76, a screenshot of web browser 7312 displaying a web page of a "Home Security" channel 7600 that is operating in a substantially full-screen mode is presented. "Home Security" channel 7600 is the channel application associated with "Home Security" touchlet 7512L of Figure 75. "Home Security" channel 7600 provides a mechanism for monitoring and/or reporting information about the user 116's home security system. The web page of "Home Security" channel 7600 may include, for example, a status window 7610 and one or more video feed windows 7612. The status window 7610 shows in text form any alert conditions

that are present as well as any useful control buttons. For example, a keypad button 7614 may be provided for launching a keypad window (not shown).

[00356] The web page of "Home Security" channel 7600 and/or of any other channel may also include a set of mini-touchlet buttons 7616 and a return-to-grid button 7618. When the user 116 selects a certain mini-touchlet button 7616, the web browser 7312 is updated (i.e., refreshed) with the web page of the corresponding channel application. Similarly, when the user 116 selects the return-to-grid button 7618, the web browser 7312 is updated (i.e., refreshed) with the channel grid web page, such as the channel grid web page shown in Figure 75.

[00357] From the user's perspective, "Home Security" touchlet 7512L of Figure 75 and "Home Security" channel 7600 of Figure 76 are substantially the same as "Home Security" touchlet 4110J and "Home Security" channel 4300 of Figure 43. However, "Home Security" channel 7600 of Figure 76 may be implemented using the web presentation framework, while "Home Security" channel 4300 of Figure 43 may be implemented using the Flex presentation framework.

[00358] Referring to Figure 77, another screenshot of web browser 7312, which is running on a user device 7310, is presented for displaying a web page of another channel grid to the user. In this example, the web browser 7312 displays a web page that includes the user's "At Work" channel grid. That is, a channel grid 7710 displays touchlets 7712 associated with the user's "At Work" channel grid, meaning the channel grid that the user is likely to use when at work.

[00359] In this example, channel grid 7710 of Figure 77 (i.e., the user's "At Work" channel grid) includes, for example, a "News Reader" touchlet 7712A, a "Stock Watch" touchlet 7712B, another "Stock Watch" touchlet 7712C, a "Business CRM" touchlet 7712D, a "Currency" touchlet 7712E, a "Banking" touchlet 7712F, a "Live News" touchlet 7712G, a "Business Calendar" touchlet 7712H, an "Email" touchlet 7712I, a "Personal Calendar" touchlet 7712J, and a "Business Finance" touchlet 7712K. More details of an example of a "Stock Watch" channel that is associated with "Stock Watch" touchlet 7712B and that is operating in the web presentation framework are described with reference to Figure 78.

**[00360]** Referring to Figure 78, a screenshot of web browser 7312 displaying a web page of a "Stock Watch" channel 7800 that is operating in a substantially full-screen mode is presented. "Stock Watch" channel 7800 is the channel application associated with "Stock Watch" touchlet 7712B of Figure 77. "Stock Watch" channel 7800 provides a mechanism for monitoring and/or reporting certain stock and/or financial information of a company of interest. In this example, "Stock Watch" channel 7800 is monitoring Brocade Communications Systems, Inc (BRCD). The web page of "Home Security" channel 7800 may include, for example, an overview window 7810, one or more information windows 7812, and a trading window 7814.

[00361] From the user's perspective, "Stock Watch" touchlet 7712B of Figure 77 and "Stock Watch" channel 7800 of Figure 78 are substantially the same as "Stock Watch" touchlet 316B and "Stock Watch" channel 1400 of Figure 14. However, "Stock Watch" channel 7800 of Figure 78 may be implemented using the web presentation framework, while "Stock Watch" channel 1400 of Figure 14 may be implemented using the Flex presentation framework.

[00362] Referring to Figures 73 through 78, from the user's perspective, while implemented using the web presentation framework, the operations of channel grid 7510 and touchlets 7512 (and the underlying channel applications) of Figure 75 and of channel grid 7710 and touchlets 7712 (and the underlying channel applications) of Figure 77 are substantially the same as channel grids, touchlets, and channels that are implemented using the Flex presentation framework. For example, a web page is designed to display channel grid 7510 that contains one or more touchlets 7512 in web browser 7312. Each touchlet 7512 may be used for presenting dynamic information of, interacting with, and/or launching its underlying channel application. Once launched, a substantially full-screen view of the channel is presented via a web page in web browser 7312.

[00363] Additionally, eventing and alerting functions may occur in the web presentation framework of information delivery system 100 of the present invention. Further, both consumer and enterprise scenarios may be implemented using the web presentation framework. Further still, the web presentation framework of information delivery system 100 supports a channel/content developer environment in which

developers may create channels/content using HTML5, JavaScript, and Cascading Style Sheets (CSS), such as CSS3.

[00364] FLEX PRESENTATION FRAMEWORK VS. WEB PRESENTATION FRAMEWORK

[00365] Referring again to Figures 1 through 11, in the Flex presentation framework embodiment of information delivery system 100, the user device 118 is the "client" in the client-server system architecture. As a result, a client portion of PID application 112 must be installed on each user device 118.

**[00366]** Referring again to Figures 73 and 74, in the web presentation framework embodiment of information delivery system 100, the web browser (e.g., web browser 7312) is the "client" in the client-server system architecture. As a result, a web browser application must be installed on each user device 7310.

[00367] Referring again to Figures 1 through 11, when developing channels and/or content for the Flex presentation framework embodiment of information delivery system 100, developers are writing applications (i.e., channels and/or content) that are compiled into an executable. Because of this, developers are (1) limited to the APIs that are exposed through Adobe proprietary software; (2) able to easily distribute an application with little more than a double-click install; and (3) able to control the precise look and feel of the application with minimal effort at production time.

[00368] Referring again to Figures 73 and 74, when developing channels and/or content for the web presentation framework embodiment of information delivery system 100, developers are writing applications (i.e., channels and/or content) that is interpreted by the browser. Because of this, developers are (1) able to build a full scale web application with nothing more than a text editor (and a browser); (2) required to test applications in all supported browsers; and (3) unrestricted by a third party feature release schedule (except as it pertains to standards implementation). Additionally, because there is no compilation step, HTML/JavaScript/CSS is quick and easy to create/edit on the fly.

[00369] Referring again to Figures 1 through 11, when developing channels and/or content for the Flex presentation framework embodiment of information delivery system 100, such as when using Adobe's RIA development tool, there are, for

example, three ways to build an application: (1) a web-based application that is meant for distributing over HTTP; (2) an Adobe AIR-based application, which is an application that runs on the desktop; and (3) a mobile application, which is an application meant to be used in a mobile device (e.g., smart phone, tablet). The development process for these three is more or less the same. However, the developer must choose which of these "project types" to use before building the application. Although, there may be ways to convert a web-based application into an Adobe AIR-based application.

**[00370]** Referring again to Figures 73 and 74, when developing channels and/or content for the web presentation framework embodiment of information delivery system 100, such as when using HTML5, JavaScript, and CSS, developers have only one choice for distribution of the application, which is the web. Therefore, the application must be interpreted by a web browser application in order to be used.

[00371] Referring again to Figures 1 through 11, the Flex presentation framework embodiment of information delivery system 100, provides the capability to access any information that is exposed at the device level (e.g., to determine the presence of a camera, microphone, speaker, etc). Accordingly, channels and/or content may make use of this device level information.

[00372] Referring again to Figures 73 and 74, currently HTML5 does not provide the ability to interrogate the client device with respect to device level information (e.g., to determine the presence of a camera, microphone, speaker, etc). The HTML5 specification is not yet certified, therefore its full functionality is still to be determined. Therefore, in the web presentation framework embodiment of information delivery system 100, native applications may be written (using native code) to run on any user device 7310. For example, in order to use a camera that is present on a certain user device 7310 for a web-conferencing application, a native application may be written to activate the camera of the certain type, brand, and/or model of device. The web presentation framework of PID application 112 of information delivery system 100 can use HTML5 to interact with the native application at the user device 7310. In this example, a camera touchlet of a channel grid may be used for presenting dynamic information of, interacting with, and/or

launching its underlying camera channel application (or any channel application using the camera), which may be use to interact with the native camera application.

[00373] Further, with respect to the various examples of channel grids, touchlets, and channels shown in Figures 12 through 72 and that are depicted using the Flex presentation framework of information delivery system 100, those skilled in the art will recognize that these examples may also be implemented using the web presentation framework of information delivery system 100.

## [00374] Conclusion

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[00375] While various inventive embodiments have been described and illustrated herein, those of ordinary skill in the art will readily envision a variety of other means and/or structures for performing the function and/or obtaining the results and/or one or more of the advantages described herein, and each of such variations and/or modifications is deemed to be within the scope of the inventive embodiments described herein. More generally, those skilled in the art will readily appreciate that all parameters, dimensions, materials, and configurations described herein are meant to be exemplary and that the actual parameters, dimensions, materials, and/or configurations will depend upon the specific application or applications for which the inventive teachings is/are used. Those skilled in the art will recognize, or be able to ascertain using no more than routine experimentation, many equivalents to the specific inventive embodiments described herein. It is, therefore, to be understood that the foregoing embodiments are presented by way of example only and that inventive embodiments may be practiced otherwise than as specifically described. Inventive embodiments of the present disclosure are directed to each individual feature, system, article, material, kit, and/or method described herein. In addition, any combination of two or more such features, systems, articles, materials, kits, and/or methods, if such features, systems, articles, materials, kits, and/or methods are not mutually inconsistent, is included within the inventive scope of the present disclosure.

[00376] The above-described embodiments of the invention can be implemented in any of numerous ways. For example, some embodiments may be implemented via one or more controllers, which may employ hardware, software or a combination thereof. In some embodiments discussed herein, one or more controllers may be implemented, at least in part, as a state machine.

[00377] When any aspect of an embodiment is implemented at least in part in software, the software code can be executed on any suitable processor or collection of processors, whether provided in a single device or computer or distributed among multiple devices/computers.

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- [00378] In this respect, various aspects of the invention, may be embodied at least in part as a computer readable storage medium (or multiple computer readable storage media) (e.g., a computer memory, one or more floppy discs, compact discs, optical discs, magnetic tapes, flash memories, circuit configurations in Field Programmable Gate Arrays or other semiconductor devices, or other tangible computer storage medium or non-transitory medium) encoded with one or more programs that, when executed on one or more computers or other processors, perform methods that implement the various embodiments of the technology discussed above. The computer readable medium or media can be transportable, such that the program or programs stored thereon can be loaded onto one or more different computers or other processors to implement various aspects of the present technology as discussed above.
  - [00379] The terms "program" or "software" are used herein in a generic sense to refer to any type of computer code or set of computer-executable instructions that can be employed to program a computer or other processor to implement various aspects of the present technology as discussed above. Additionally, it should be appreciated that according to one aspect of this embodiment, one or more computer programs that when executed perform methods of the present technology need not reside on a single computer or processor, but may be distributed in a modular fashion amongst a number of different computers or processors to implement various aspects of the present technology.
- 25 [00380] Computer-executable instructions may be in many forms, such as program modules, executed by one or more computers or other devices. Generally, program modules include routines, programs, objects, components, data structures, etc. that perform particular tasks or implement particular abstract data types. Typically the functionality of the program modules may be combined or distributed as desired in various embodiments.
  - [00381] Also, the technology described herein may be embodied as a method, of which at least one example has been provided. The acts performed as part of the

method may be ordered in any suitable way. Accordingly, embodiments may be constructed in which acts are performed in an order different than illustrated, which may include performing some acts simultaneously, even though shown as sequential acts in illustrative embodiments.

5 [00382] All definitions, as defined and used herein, should be understood to control over dictionary definitions, definitions in documents incorporated by reference, and/or ordinary meanings of the defined terms.

[00383] The indefinite articles "a" and "an," as used herein in the specification, unless clearly indicated to the contrary, should be understood to mean "at least one."

10 [00384] The phrase "and/or," as used herein in the specification, should be understood to mean "either or both" of the elements so conjoined, i.e., elements that are conjunctively present in some cases and disjunctively present in other cases. Multiple elements listed with "and/or" should be construed in the same fashion, i.e., "one or more" of the elements so conjoined. Other elements may optionally be 15 present other than the elements specifically identified by the "and/or" clause, whether related or unrelated to those elements specifically identified. Thus, as a non-limiting example, a reference to "A and/or B", when used in conjunction with open-ended language such as "comprising" can refer, in one embodiment, to A only (optionally including elements other than B); in another embodiment, to B only (optionally 20 including elements other than A); in yet another embodiment, to both A and B (optionally including other elements); etc.

[00385] As used herein in the specification, "or" should be understood to have the same meaning as "and/or" as defined above. For example, when separating items in a list, "or" or "and/or" shall be interpreted as being inclusive, i.e., the inclusion of at least one, but also including more than one, of a number or list of elements, and, optionally, additional unlisted items. Only terms clearly indicated to the contrary, such as "only one of" or "exactly one of," or, when used in claims, "consisting of," will refer to the inclusion of exactly one element of a number or list of elements. In general, the term "or" as used herein shall only be interpreted as indicating exclusive alternatives (i.e. "one or the other but not both") when preceded by terms of exclusivity, such as "either," "one of," "only one of," or "exactly one of."

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"Consisting essentially of," when used in claims, shall have its ordinary meaning as used in the field of patent law.

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As used herein in the specification, the phrase "at least one," in reference [00386] to a list of one or more elements, should be understood to mean at least one element selected from any one or more of the elements in the list of elements, but not necessarily including at least one of each and every element specifically listed within the list of elements and not excluding any combinations of elements in the list of elements. This definition also allows that elements may optionally be present other than the elements specifically identified within the list of elements to which the phrase "at least one" refers, whether related or unrelated to those elements specifically identified. Thus, as a non-limiting example, "at least one of A and B" (or, equivalently, "at least one of A or B," or, equivalently "at least one of A and/or B") can refer, in one embodiment, to at least one, optionally including more than one, A, with no B present (and optionally including elements other than B); in another embodiment, to at least one, optionally including more than one, B, with no A present (and optionally including elements other than A); in yet another embodiment, to at least one, optionally including more than one, A, and at least one, optionally including more than one, B (and optionally including other elements); etc.

[00387] In the specification above, all transitional phrases such as "comprising," "including," "carrying," "having," "containing," "involving," "holding," "composed of," and the like are to be understood to be open-ended, i.e., to mean including but not limited to. Only the transitional phrases "consisting of" and "consisting essentially of" shall be closed or semi-closed transitional phrases, respectively, as set forth in the United States Patent Office Manual of Patent Examining Procedures, Section 2111.03.

## **CLAIMS**

1. An apparatus to provide secure user-centric information via at least one user platform operated by a user, the apparatus comprising:

at least one communication interface to facilitate wired and/or wireless communications with the at least one user platform via one or more transmission media;

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at least one memory to store processor-executable instructions; and at least one processor communicatively coupled to the at least one communication interface and the at least one memory, wherein upon execution of the processor-executable instructions by the at least one processor, the at least one processor establishes a bidirectional, asynchronous user session to manage provision of and interaction with the secure user-centric information by:

A) implementing a plurality of channels through which the user receives and/or interacts with, via the at least one user platform, respective portions of the secure user-centric information;

B) controlling the at least one communication interface to receive, from the at least one user platform, a user identity for the user and a platform identity for the at least one user platform;

C) authenticating the user and the user platform to receive the secure user-centric information based at least in part on the user identity and the platform identity; and

D) if the user and the user platform are authenticated in C), controlling the at least one communication interface so as to cause the bidirectional, asynchronous user session to be established between the apparatus and a web browser of the at least one user platform and to transmit to the at least one user platform during the user session first authenticated channel information relating to at least one authorized channel of the plurality of channels implemented in A), based at least in part on information access rights and/or security protocols respectively associated with the corresponding plurality of channels, the user, and the user platform,

wherein in D), the processor is configured to control the at least one communication interface to cause the bidirectional, asynchronous user session

to be established without requiring a separate application other than the web browser to be installed on the user platform to establish the user session.

- 2. The apparatus of claim 1, wherein in D), the processor is configured to control the at least one communication interface so as to cause the user session to be established by transmitting a HTML file to the user platform.
- 3. The apparatus of claim 2, wherein the HTML file is a HTML5 file.

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- The apparatus of claim 3, wherein in D), the processor controls the at least one
   communication interface so as to cause the user session to be established using a
   WebSocket Secure protocol.
  - 5. The apparatus of claim 1, wherein in D), the at least one authorized channel comprises a television channel, and wherein the first authenticated channel information comprises a media program.
  - 6. The apparatus of claim 5, wherein the first authenticated channel information comprises at least one advertisement.
- 7. The apparatus of claim 6, wherein the at least one advertisement is based on a context of the media program.
  - 8. The apparatus of claim 7, wherein the context comprises one or more characteristics of the media program.
  - 9. The apparatus of claim 8, wherein a product or service to which the at least one advertisement is directed is based on a subject matter of the media program.
- 10. The apparatus of claim 8, wherein a product or service to which the at least30 one advertisement is directed is based on a subject matter of an advertisement provided within the media program.
  - 11. The apparatus of claim 8, wherein in D):

the at least one user platform comprises a first user platform and a second user platform;

the processor controls the at least one communication interface so as to cause the bidirectional, asynchronous user session to be established between the apparatus and a web browser of each of the first user platform and the second user platform;

the at least one advertisement comprises a first advertisement provided to the first user platform and a second advertisement provided to the second user platform; and

the first advertisement and the second advertisement include related subject matter.

12. The apparatus of claim 11, wherein:

the first advertisement provided to the first user platform is a national advertisement; and

- the second advertisement provided to the second user platform is a local advertisement related to content of the national advertisement.
  - 13. The apparatus of claim 11, in combination with the first user platform, wherein the first user platform comprises a television set or a set top box.

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- 14. The apparatus of claim 11, in combination with the second user platform, wherein the second user platform comprises a mobile computing device.
- 15. The apparatus of claim 14, wherein the second user platform comprises atablet device, a smartphone, or a laptop computer.
  - 16. The apparatus of claim 6, wherein the at least one advertisement comprises an interactive advertisement.
- 30 17. The apparatus of claim 1, wherein the at least one memory stores at least one user profile to identify user preferences, platform identities, and service support instructions that determine how the secure user-centric information behaves on the user platform, and wherein:

C) comprises authenticating the user and the user platform based at least in part on the user profile; and

D) comprises transmitting the first authenticated channel information to the at least one user platform based at least in part on the user profile.

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## 18. The apparatus of claim 1, wherein:

the at least one memory stores an authentication directory to provide the information access rights and/or security protocols respectively associated with the corresponding plurality of channels, the user, and the user platform;

the authentication directory includes a plurality of user accounts, a plurality of device accounts, and a plurality of application accounts; and

C) comprises authenticating the user and the user platform based at least in part on the plurality of user accounts and the plurality of device accounts included in the authentication directory.

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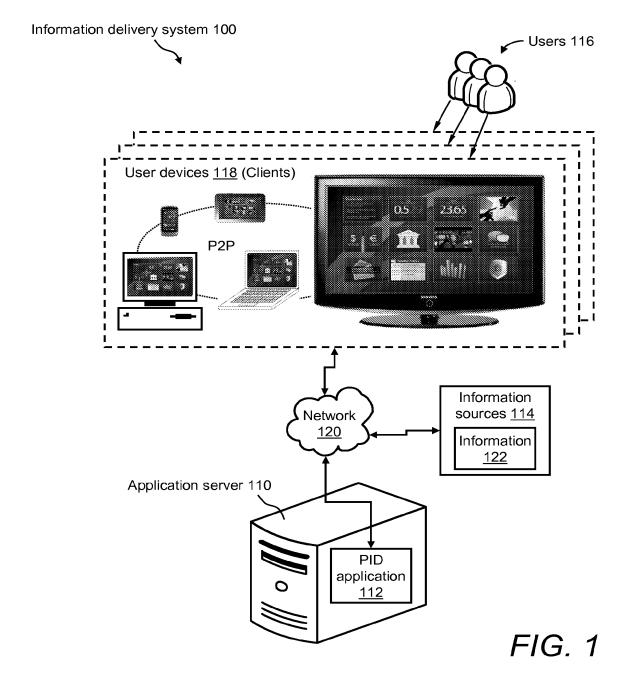
- 19. A method for providing secure user-centric information via at least one user platform operated by a user, the method comprising:
- A) implementing a plurality of channels through which the user receives and/or interacts with, via the at least one user platform, respective portions of the secure user-centric information; B) receiving, from the at least one user platform, a user identity for the user and a platform identity for the at least one user platform;
- C) authenticating the user and the user platform to receive the secure usercentric information based at least in part on the user identity and the platform identity; and
- D) if the user and the user platform are authenticated in C), causing a bidirectional, asynchronous user session to be established with a web browser of the at least one user platform and transmitting to the at least one user platform during the user session first authenticated channel information relating to at least one authorized channel of the plurality of channels implemented in A), based at least in part on information access rights and/or security protocols respectively associated with the corresponding plurality of channels, the user, and the user platform,

wherein in D), the bidirectional, asynchronous user session is established without requiring a separate application other than the web browser to be installed on the user platform to establish the user session.

- 5 20. At least one computer readable storage medium storing processor-executable instructions that, when executed by at least one processor, perform a method for providing secure user-centric information via at least one user platform operated by a user, the method comprising:
  - A) implementing a plurality of channels through which the user receives and/or interacts with, via the at least one user platform, respective portions of the secure user-centric information; B) receiving, from the at least one user platform, a user identity for the user and a platform identity for the at least one user platform;

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- C) authenticating the user and the user platform to receive the secure usercentric information based at least in part on the user identity and the platform identity; and
  - D) if the user and the user platform are authenticated in C), causing a bidirectional, asynchronous user session to be established with a web browser of the at least one user platform and transmitting to the at least one user platform during the user session first authenticated channel information relating to at least one authorized channel of the plurality of channels implemented in A), based at least in part on information access rights and/or security protocols respectively associated with the corresponding plurality of channels, the user, and the user platform,
- wherein in D), the bidirectional, asynchronous user session is established
  25 without requiring a separate application other than the web browser to be installed on
  the user platform to establish the user session.



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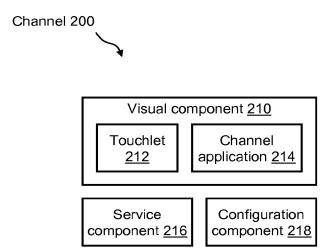


FIG. 2

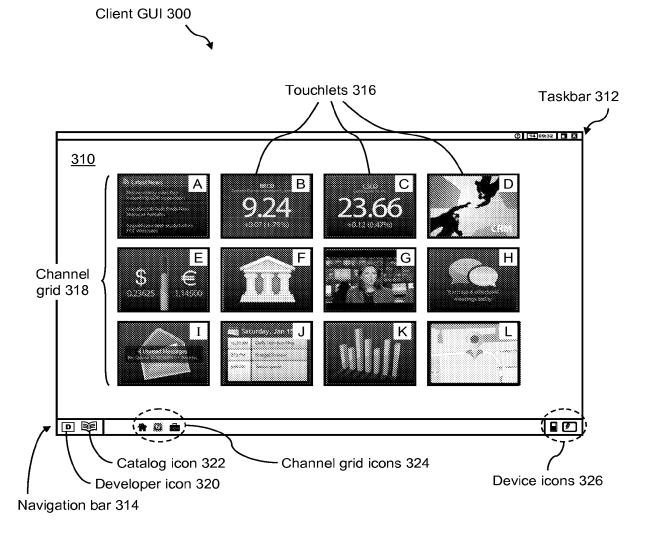


FIG. 3

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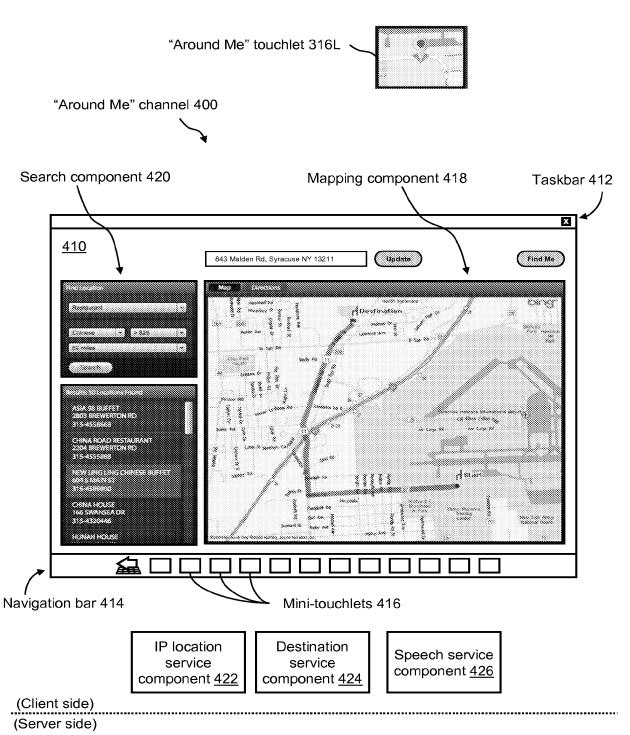


FIG. 4

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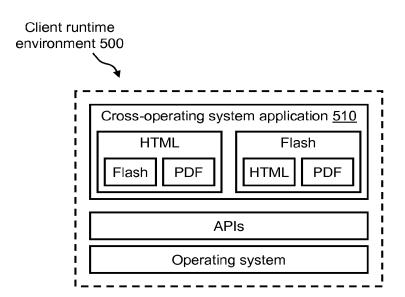


FIG. 5

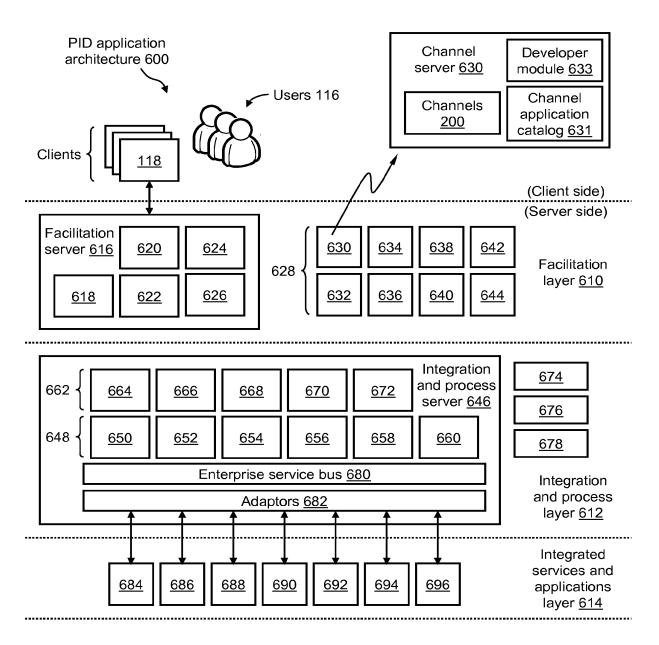
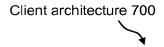


FIG. 6



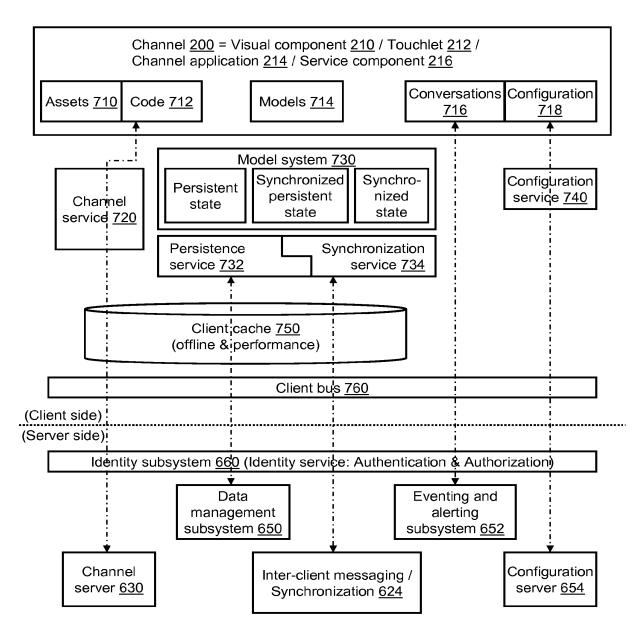


FIG. 7

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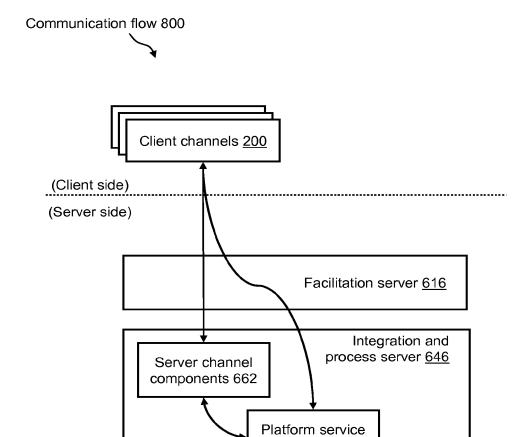
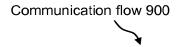


FIG. 8

components 648

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(Client side)
(Server side)

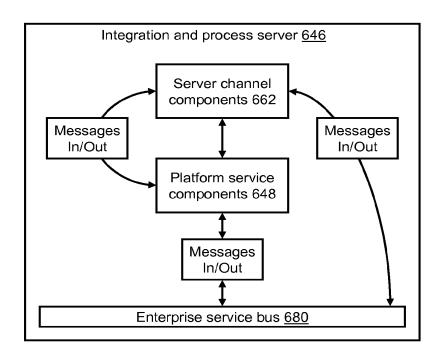


FIG. 9

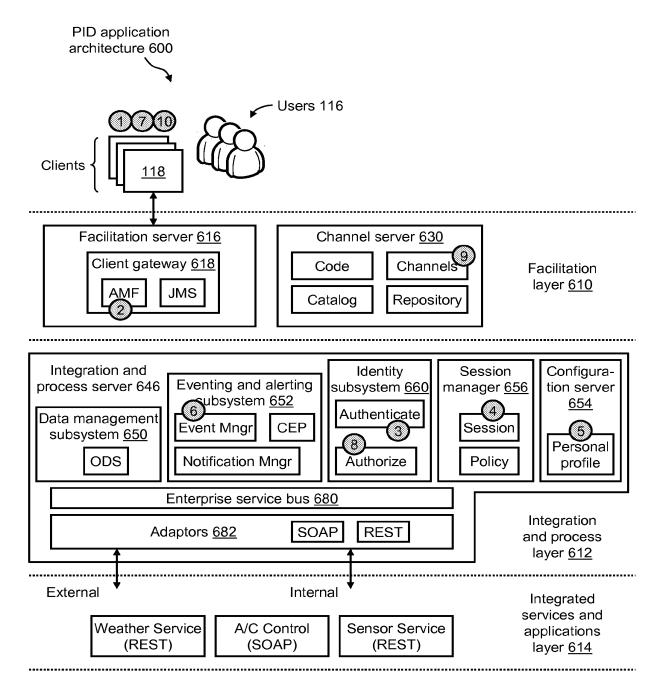


FIG. 10

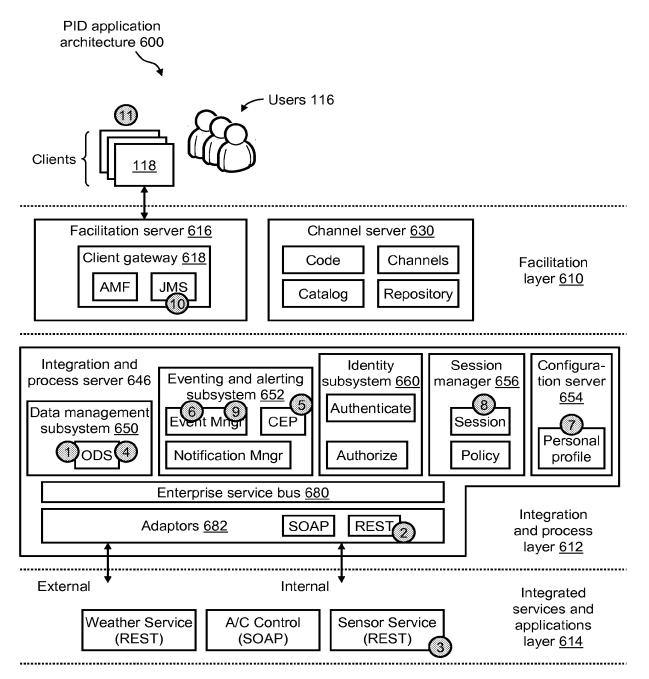


FIG. 11

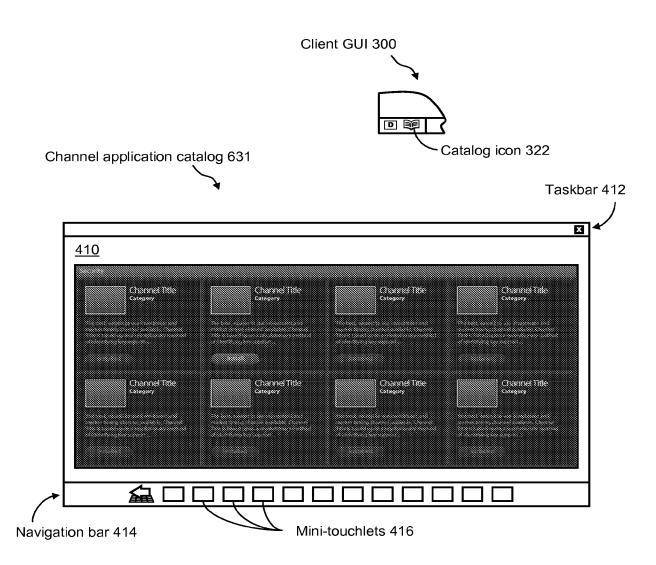


FIG. 12

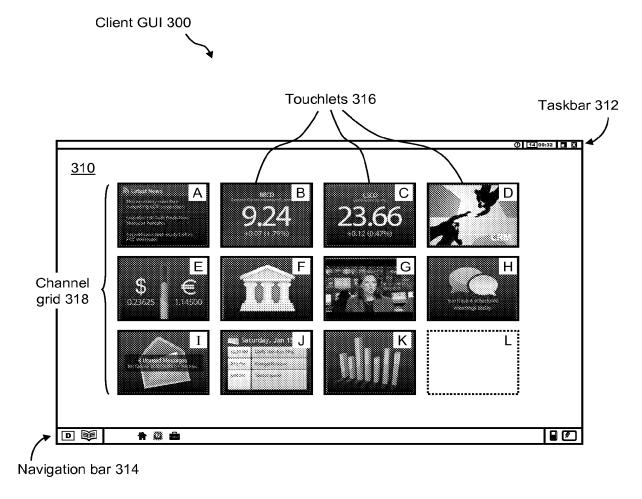


FIG. 13

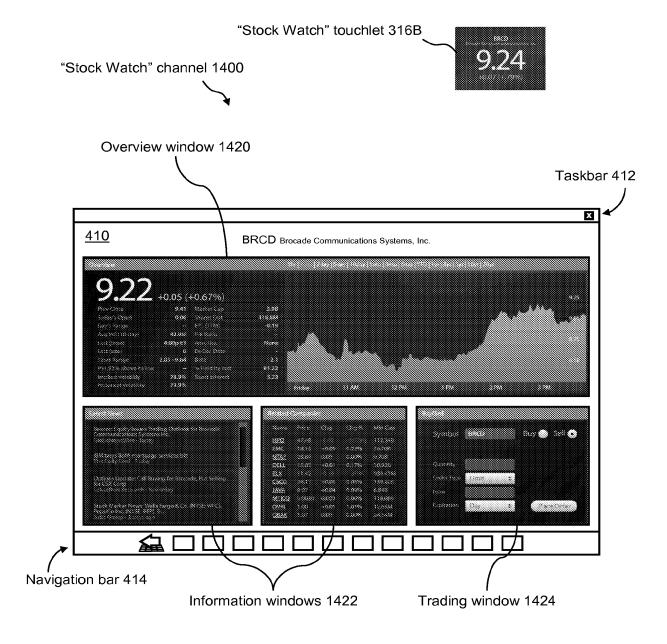


FIG. 14

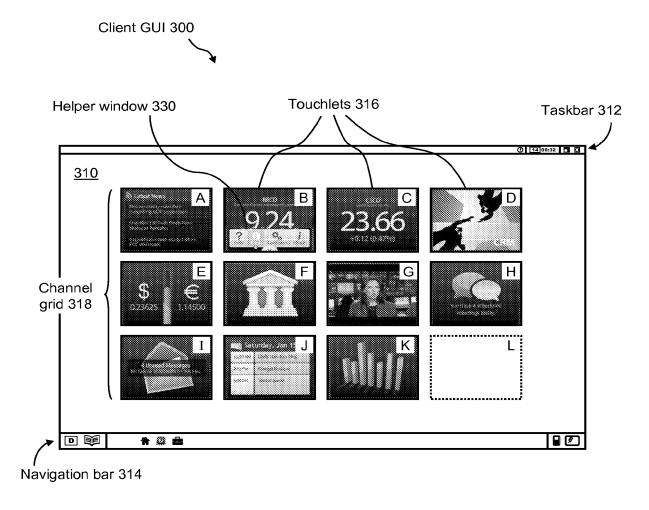


FIG. 15

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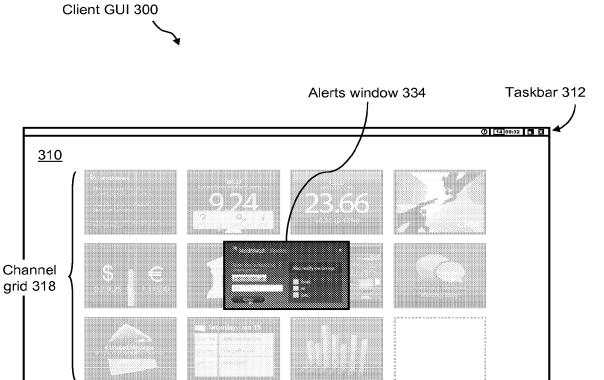


FIG. 16

□ ∭

Navigation bar 314

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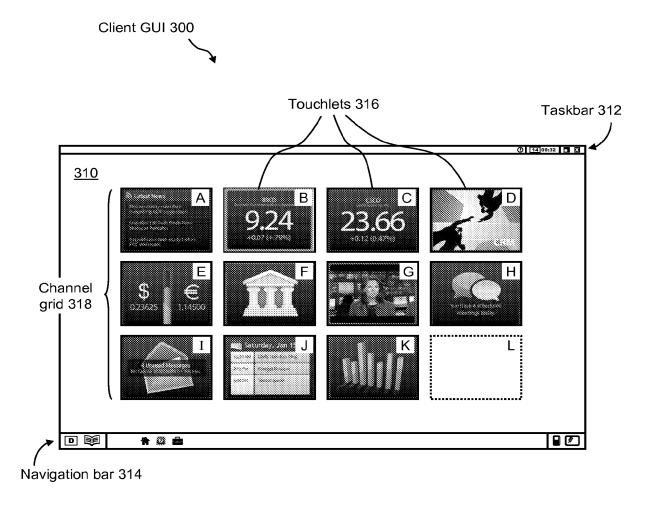


FIG. 17

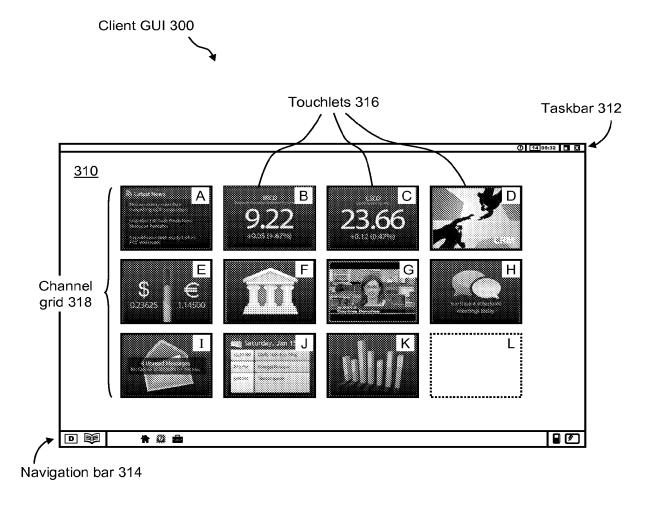


FIG. 18

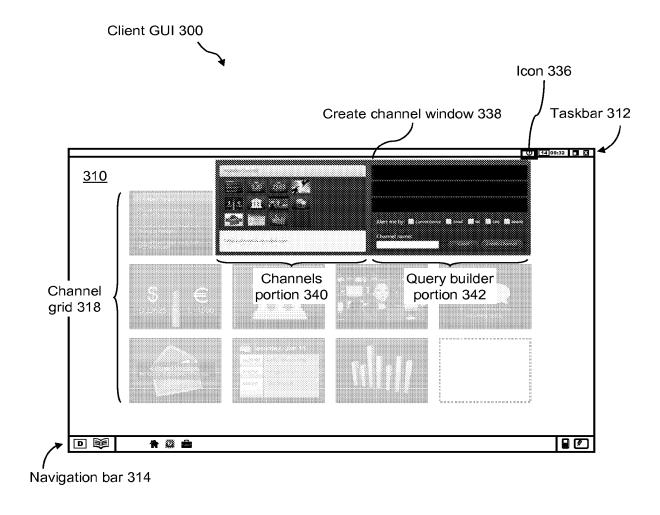
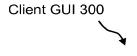


FIG. 19



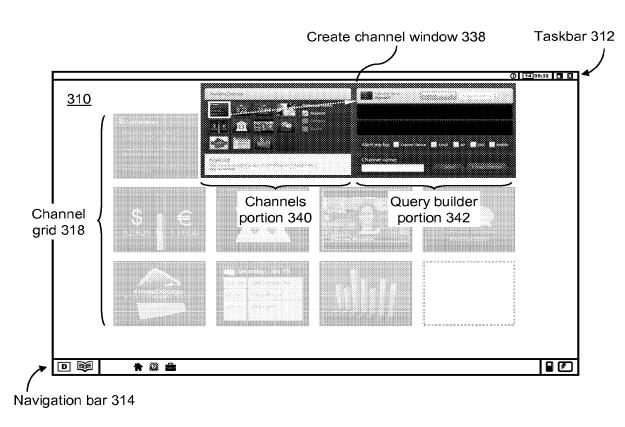


FIG. 20

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Client GUI 300

D 👼

Navigation bar 314

**A** 🗯 🚊

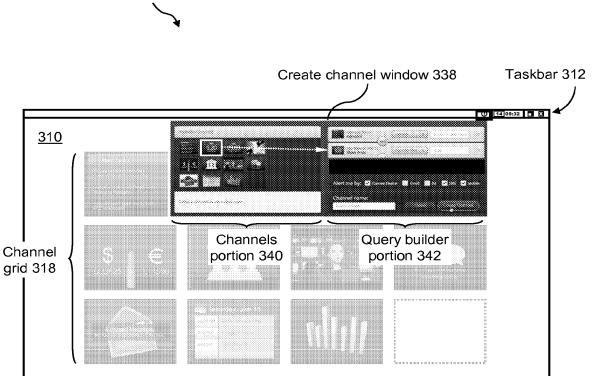
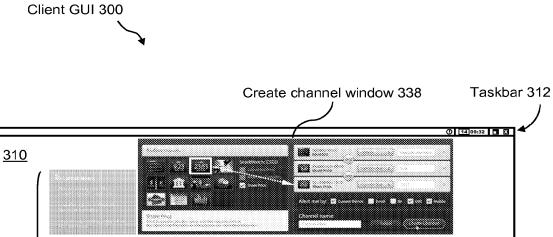


FIG. 21

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Channels

portion 340

Query builder

portion 342

Navigation bar 314

D 👼

🕈 🔯 🍰

Channel

grid 318

FIG. 22

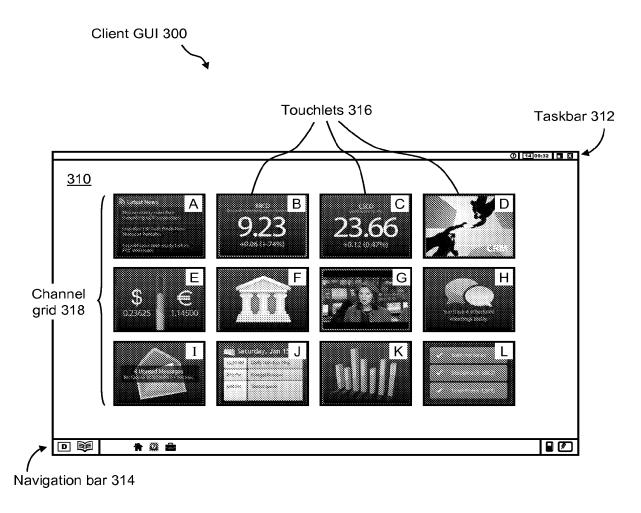


FIG. 23

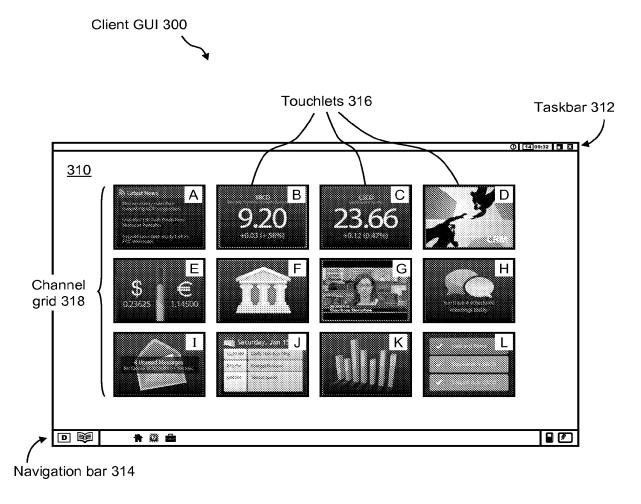


FIG. 24

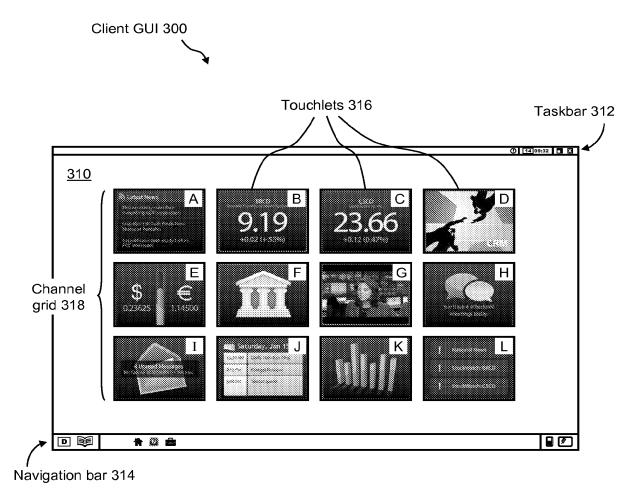


FIG. 25

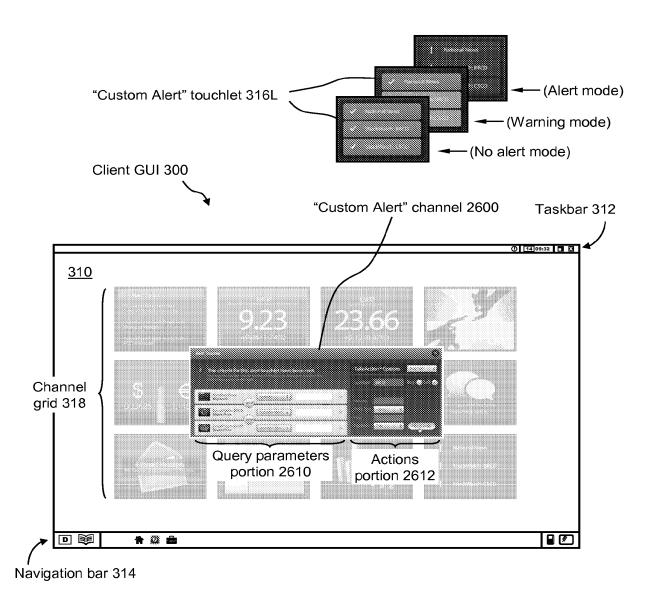


FIG. 26

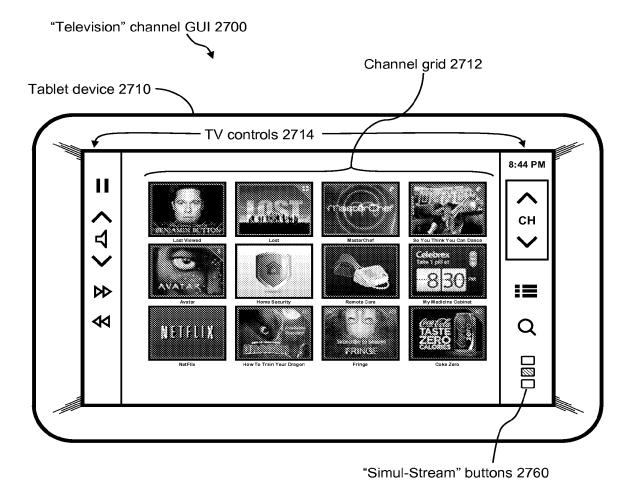
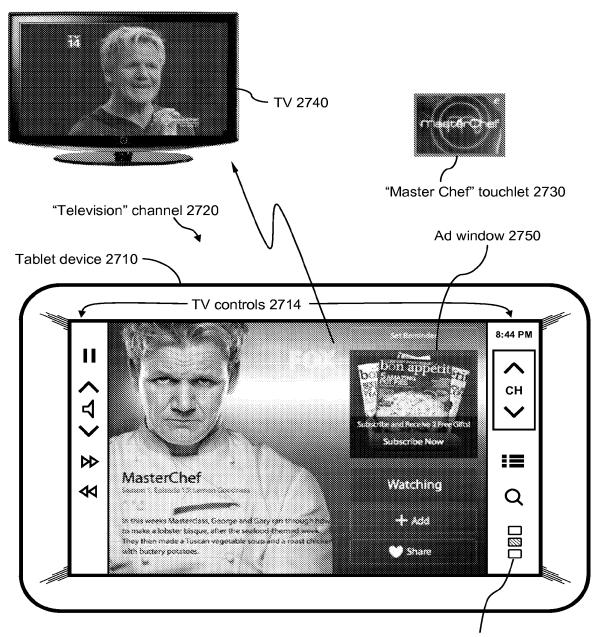


FIG. 27



"Simul-Stream" buttons 2760

FIG. 28

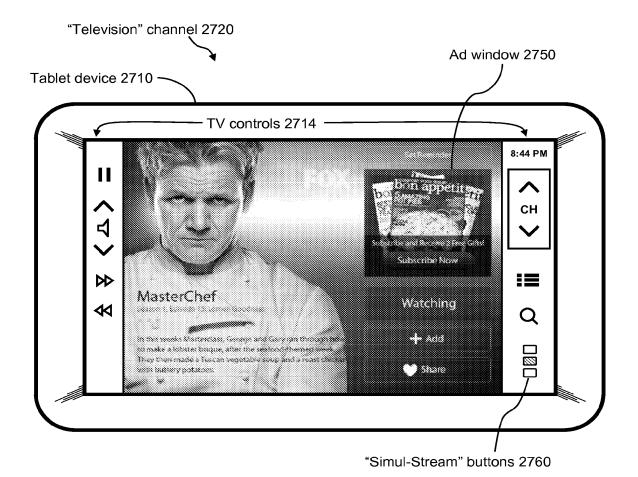


FIG. 29

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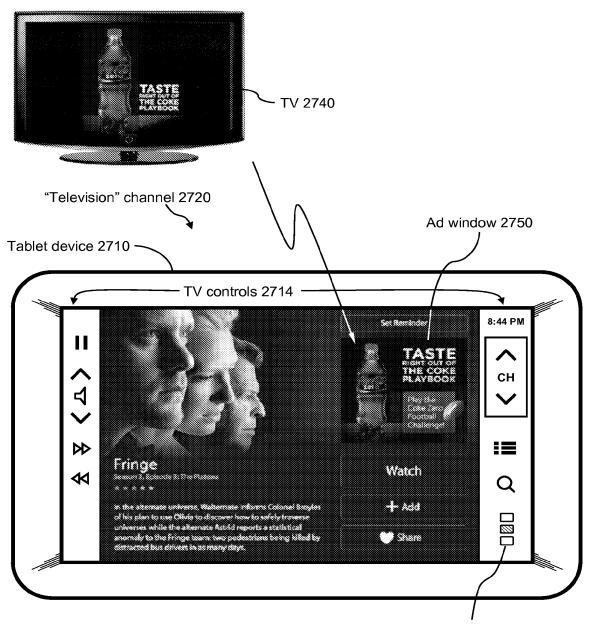


FIG. 30

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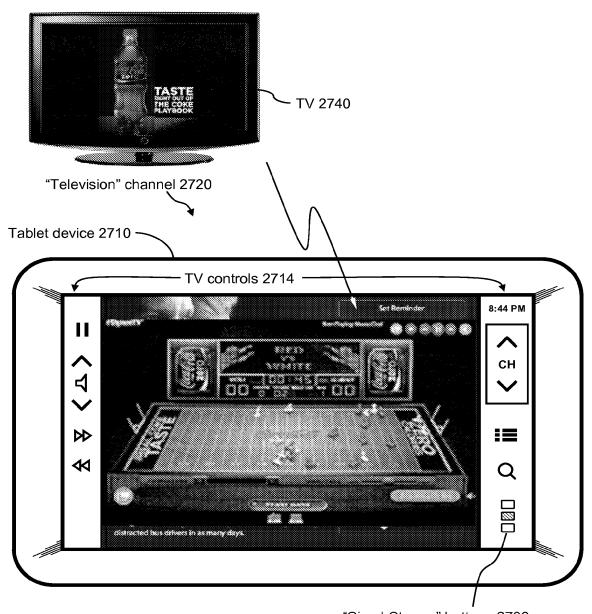


FIG. 31

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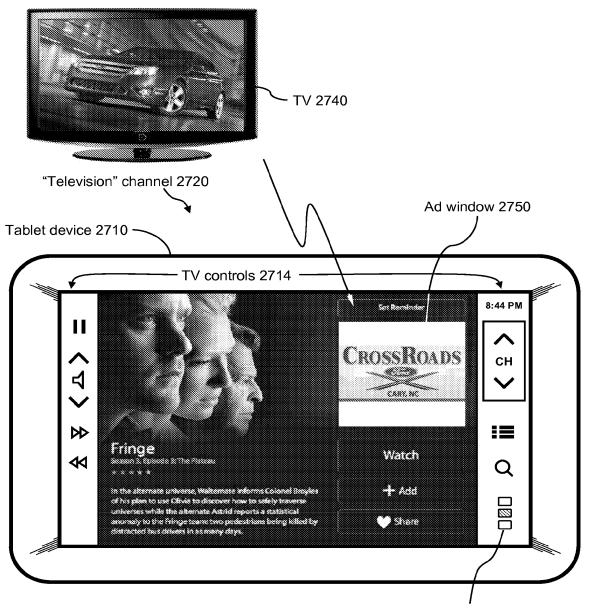


FIG. 32

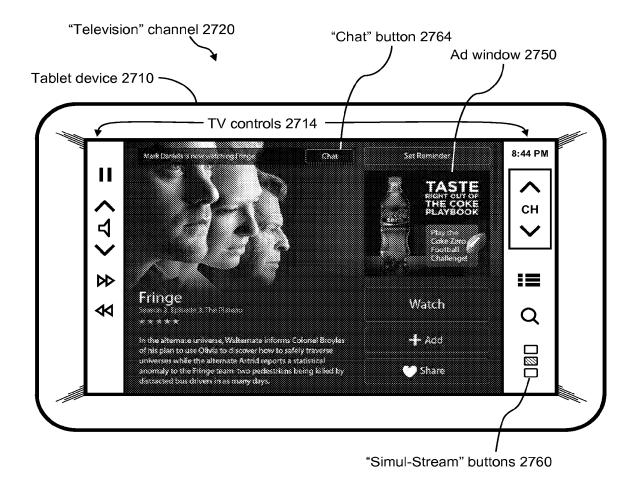


FIG. 33

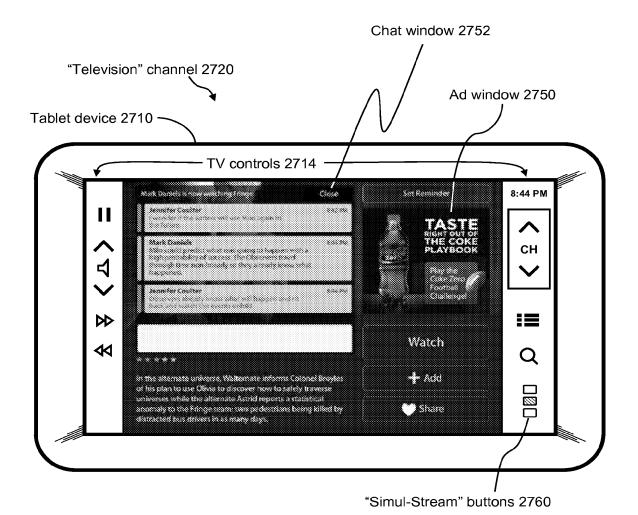


FIG. 34

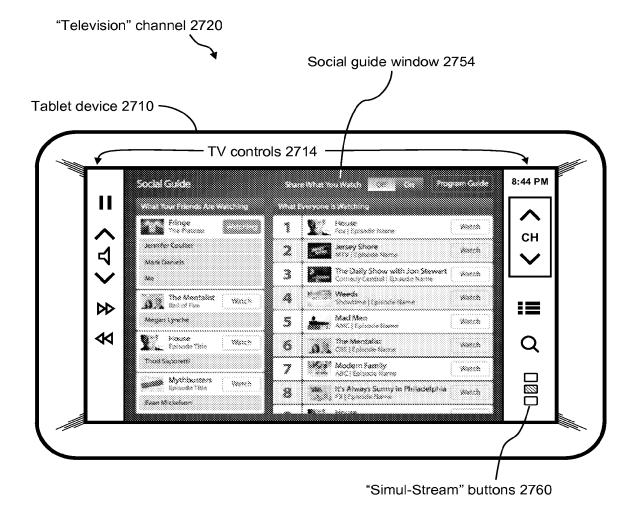


FIG. 35

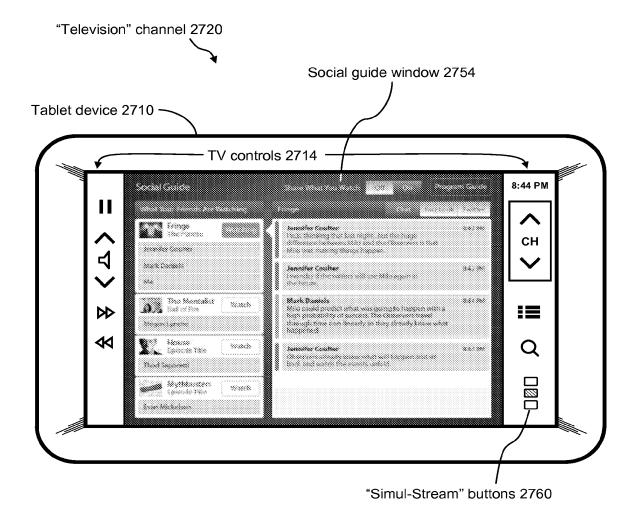


FIG. 36

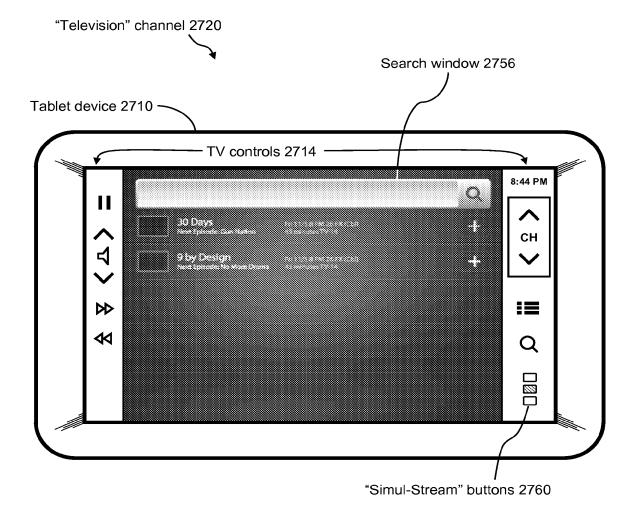


FIG. 37

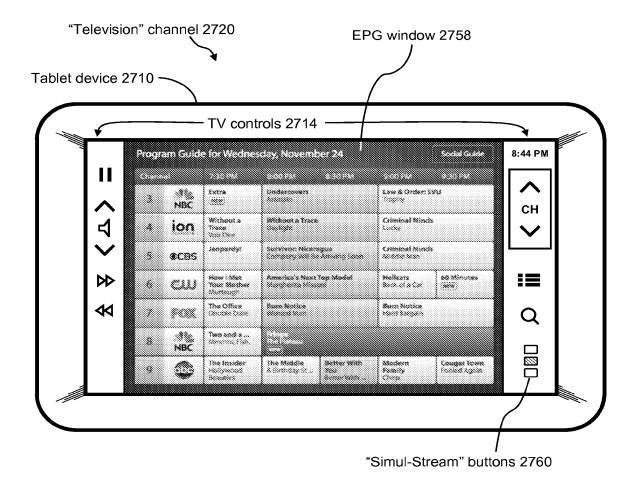


FIG. 38

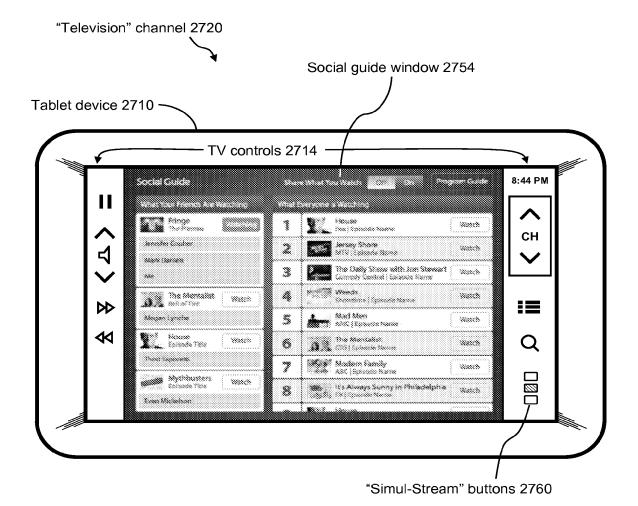
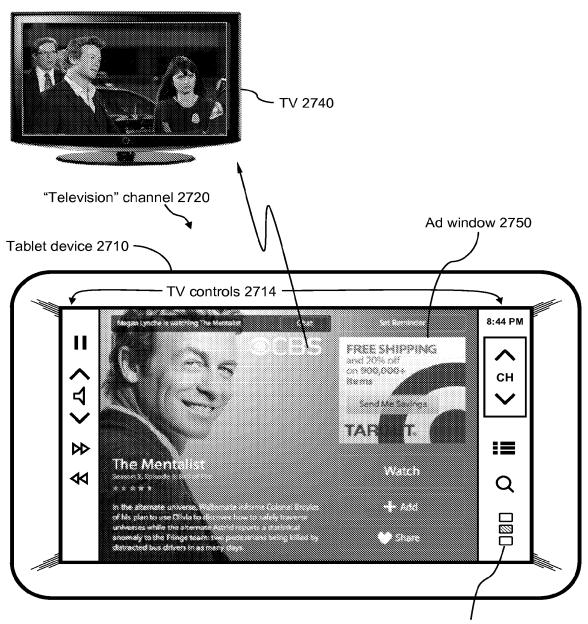


FIG. 39



"Simul-Stream" buttons 2760

FIG. 40

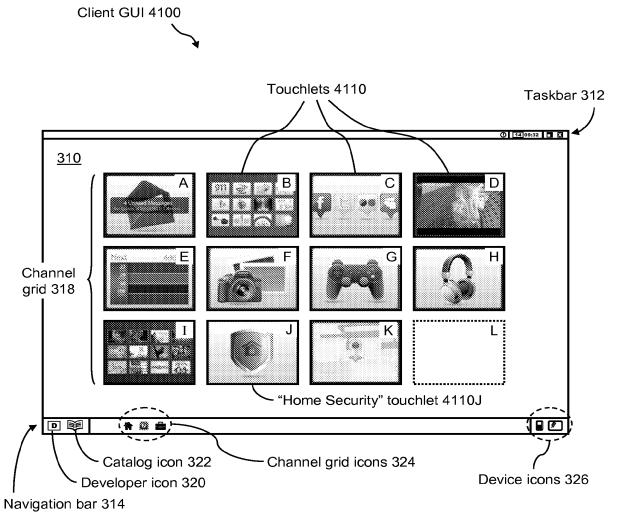


FIG. 41

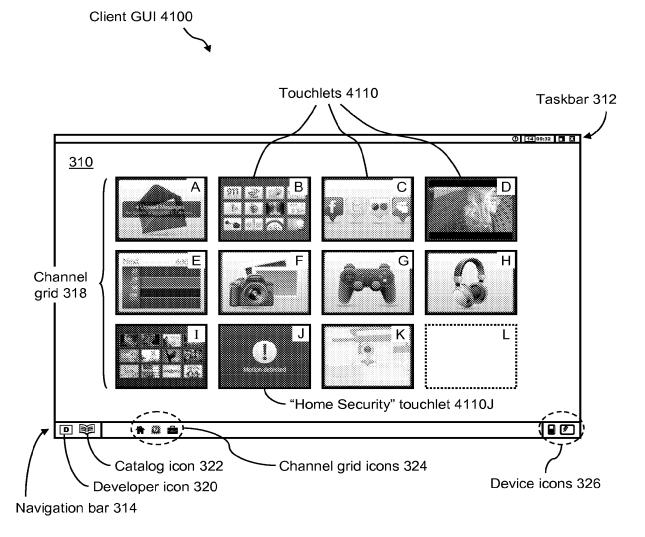


FIG. 42

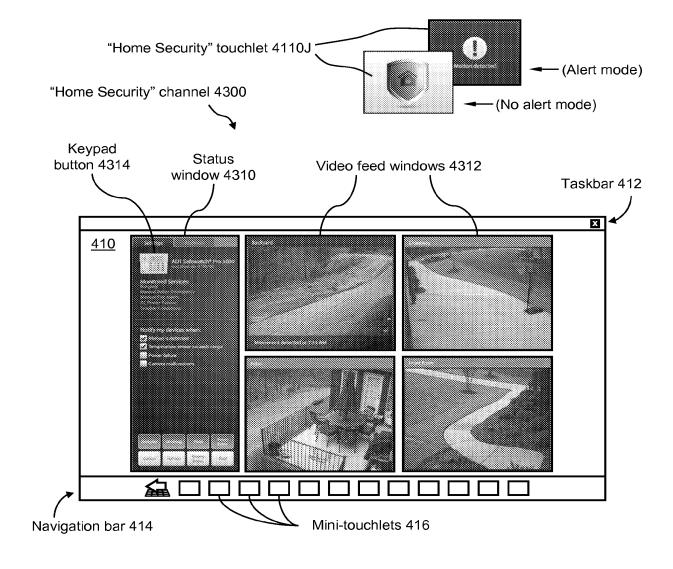


FIG. 43

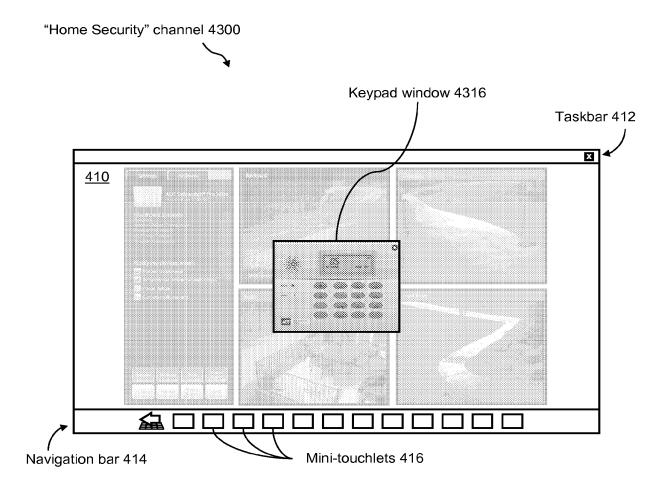


FIG. 44

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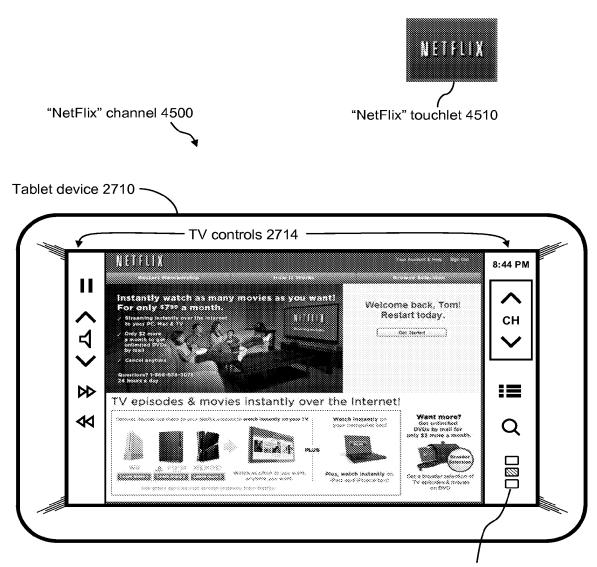


FIG. 45

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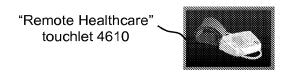


FIG. 46

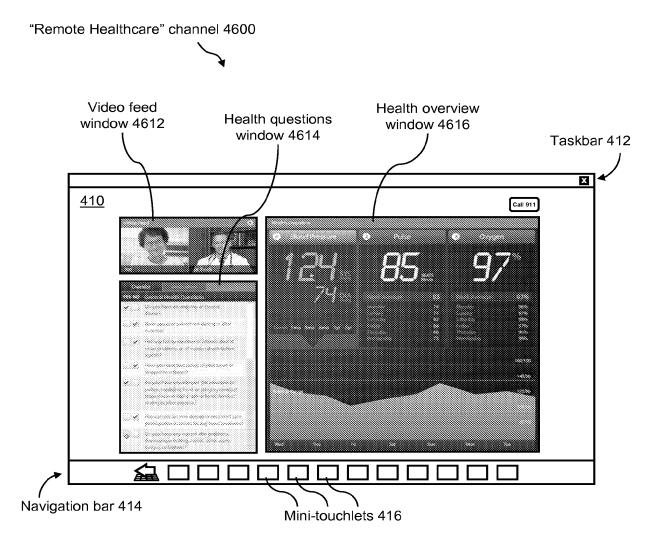


FIG. 47

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"My Medicine Cabinet" channel 4800

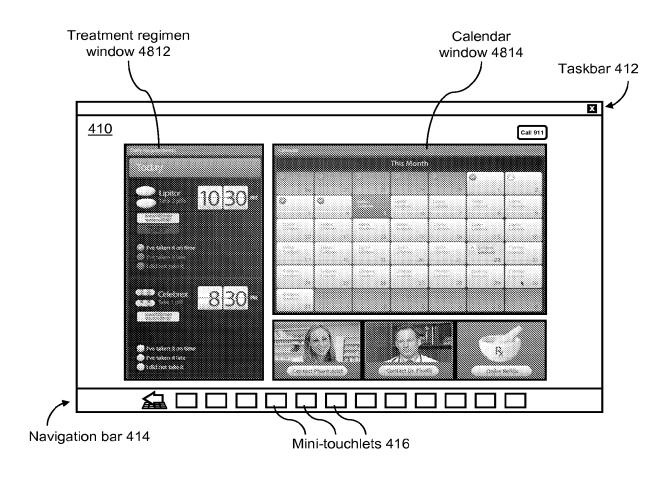
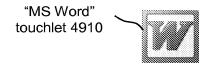


FIG. 48

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"MS Word" channel 4900

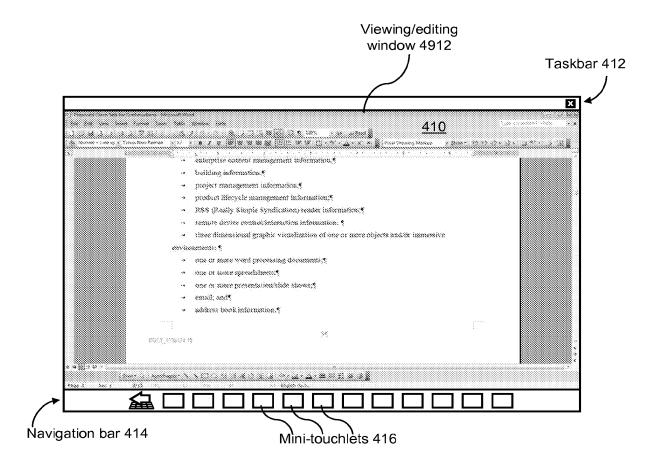


FIG. 49



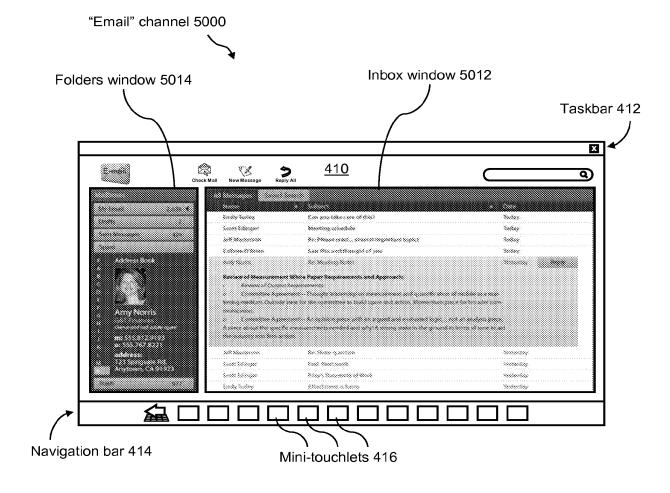


FIG. 50