

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Jiang XiaoPing

Examiner: Benyan Ketema

Serial No.: 11/437,517

Group Art Unit: 2629

Filed: May 18, 2006

Docket No.: CD06039

Title: Two-Pin Buttons

Confirmation No.: 2623

Assignee: Cypress Semiconductor

RESPONSE TO NON-FINAL OFFICE ACTION DATED AUGUST 3, 2010

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

Dear Sir:

Amendments to the present application and/or associated remarks are detailed below.

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REMARKS

This communication is responsive to the Non-Final Office Action mailed on August 3, 2010. Claims 1-20 are currently pending. Claims 1-4 and 18 are amended. No claims have been cancelled or withdrawn. Applicant respectfully requests reconsideration of the present objections and rejections. Applicant believes this communication to be fully responsive to all issues raised in the Action.

Examiner Interview

Applicant thanks the Examiner for the courtesy of the telephone interview conducted on October 25, 2010, in which it was agreed that the Applicant would amend the claims to more accurately claim the subject matter of the specification, which overcomes the references cited.

Amendments

The amendments to the claims are fully supported by the specification as originally filed, and no new matter will be added by entry of the amendment. The amendments to the claims are made to satisfy Applicants' preferences, not necessarily to satisfy any legal requirement(s) of the patent laws. The amendments clarify the claims and are not intended to limit the scope of equivalents to which any claim element may be entitled. Applicants respectfully request reconsideration of the above-identified application in view of the amendments above and the remarks that follow.

§102 Rejections

Claims 1, 2, 4 and 18 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Tsujioka et al. (U.S. Patent Number 5,518,078, hereinafter "Tsujioka").

Regarding independent claim 1, Examiner stated:

*"Tsujioka et al discloses a method (Column 1 line 5-10), comprising:
detecting a presence of a conductive object on a sensing device; (Column
9 line 25- Column 10 line 4)*

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recognizing three or more button (Fig. 5 item 49, buttons) operations performed by the conductive object (Fig 5 item 50 & 51, finger or pen) using two sensing areas of the sensing device (Fig 5 & 6 item 24 & 25, two sensing areas)."

Merely in the interest of advancing prosecution and without conceding the propriety of the rejection, Applicant submits that claim 1 has been amended to recite:

A method, comprising:
detecting a presence of a conductive object on a capacitance sensing device, the sensing device comprising at least two sensing areas each coupled to a capacitance measurement input; and
recognizing a plurality of button activations performed by the detected presence of the conductive object, wherein the number of the plurality of button activations is equal to at least the number of sensing areas plus one and wherein a combination of the at least two sensing areas is used to recognize at least one of the plurality of button operations.

Applicant respectfully submits that Tsujioka does not disclose "**recognizing a plurality of button activations** performed by the detected presence of the conductive object, **wherein the number of the plurality of button activations is equal to at least the number of sensing areas plus one** and wherein a combination of the at least two sensing areas is used to recognize at least one of the plurality of button operations" as recited in the present application. Tsujioka (Col. 10, lines 4-9) teaches:

"The control device 28 detects the pressing position as the operating position of the transparent electrodes 39 to 42; 32, 33, that is, the input coordinates as the coordinates (x, y), (x=1 to 4, y=1) of the pressing region 49 of two lines and four rows as an example of matrix arrangement."

Figure 5 of Tsujioka shows a 2x4 matrix of buttons (49) and a touchscreen area (first input area 24). Tsujioka does not disclose that the 2x4 matrix of buttons (49) recognizes "**three or more button operations...using two areas of the sensing device.**"

Therefore, applicant submits that Tsujioka does not teach or suggest the claimed material of claim 1.

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Claims 2 and 4 depend from independent claim 1 and incorporate all of the features therein. Claim 2 and 4 are also asserted to be allowable for the reasons presented above, and Applicant respectfully requests notification of same. Applicant considers additional elements of claims 2 and 4 to further distinguish over Tsujioka and Applicant reserves the right to present arguments to this effect at a later date.

Regarding independent claim 18, Examiner stated:

"Tsujioka et al discloses *an apparatus (Column 1, touch panel), comprising:*
a first sensing area to detect a presence of a conductive object on a sensing device; (Fig 9 item 25)
a second senign area to detect thr presence of the conductive object on the sensing device; (Fig 9 item 24)
means for recognizing three or more button operations (Fig 9 item 39-42) performed by the conductive object (Fig 5 item 51 and 50, finger or pen) using two sensing areas on the sensing device (Fig 9 item 24 & 25, two sensing areas)."

Merely in the interest of advancing prosecution and without conceding the propriety of the rejection, Applicant submits that claim 1 has been amended to recite:

An apparatus, comprising:

a first sensing area configured to detect a presence of a conductive object on a sensing device;
a second sensing area configured to detect the presence of the conductive object on the sensing device; and
means for recognizing three or more button activations performed by the conductive object using the first and second sensing areas on the sensing device.

For at least the reasons stated for independent claim 1 above, Tsujioka does not recite the claimed features of claim 18. In particular, Tsujioka does not disclose **"recognizing three or more button activations** performed by the conductive object **using the first and second sensing areas** on the sensing device" as claimed. Applicant respectfully submits that claim 18 is in condition for allowance and requests notification of same.

§103 Rejections

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Claim 3 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tsujioka in view of Collins (U.S. Published Application 2004/0239616, hereinafter "Collins").

Claim 3 depends from independent claim 1 and incorporates all of the features therein. Claim 3 is also asserted to be allowable for the reasons presented above, and Applicant respectfully requests notification of same.

Claims 19 and 20 was rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Tsujioka in view of Gritzinger et al. (U.S. Published Application 2006/0097992, hereinafter "Gritzinger").

Claims 19 and 20 depend from independent claim 18 and incorporate all of the features therein. Claims 19 and 20 are also asserted to be allowable for the reasons presented above, and Applicant respectfully requests notification of same.

Allowed Claims

Claims 5-17 have been allowed by the Patent Office. Applicant thanks the Examiner.

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Reservation of Rights

Applicant believes every assertion by the Office Action has been addressed, however in the interest of clarity and brevity, Applicant may not have asserted every available argument for each assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record is relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

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Conclusion

Applicant respectfully submit that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's agent, Ryan Seguire, at (425) 753-4459.

Please charge any additional fees under 37 CFR §§ 1.16, 1.17, 1.18, 1.20 and 1.21 that may be required to maintain pendency of the present application, or apply any credits to our PTO deposit account number: 50-3781.

Respectfully submitted,
Jiang XiaoPing

By their Representative,
Agent for Applicant

Date October 25, 2010

By: /Ryan Seguire/
Ryan D. Seguire
Reg. No. 64,577

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Electronic Acknowledgement Receipt

EFS ID:	8765756
Application Number:	11437517
International Application Number:	
Confirmation Number:	2623
Title of Invention:	Two-pin buttons
First Named Inventor/Applicant Name:	Jiang XiaoPing
Customer Number:	60909
Filer:	Larry Joel Johnson/Penny Jackson
Filer Authorized By:	Larry Joel Johnson
Attorney Docket Number:	CD06039
Receipt Date:	03-NOV-2010
Filing Date:	18-MAY-2006
Time Stamp:	23:44:55
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment/Req. Reconsideration-After Non-Final Reject	CD06039AmendmentAfterNonFinal11032010.pdf	3575179 a4c9499945ed376c51891dac6ec7233a7bda1cd	no	14

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.

CLAIMS

Claims pending

- At time of the Action: 1-20.
- After this Response: 1-20.
- Currently Amended claims:** 1-4 and 18.
- Currently Cancelled claims:** None.
- Currently Withdrawn claims:** None.
- New claims:** None.

1. (Currently Amended) A method, comprising:

detecting a presence of a conductive object on a capacitance sensing device, the sensing device comprising at least two sensing areas each coupled to a capacitance measurement input; and

recognizing ~~three or more~~ a plurality of button operations activations performed by the detected presence of the conductive object, wherein the number of the plurality of button activations is equal to at least the number of sensing areas plus one and wherein a combination of the at least two sensing areas is used to recognize at least one of the plurality of button operations using two sensing areas of the sensing device.

2. (Currently Amended) The method of claim 1, wherein recognizing the plurality of three or more button operations activations comprises:

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recognizing a first button ~~operation~~ activation when the presence of the
conductive object is detected on a first sensing area of the at least two
sensing areas of the sensing device;

recognizing a second button ~~operation~~ activation when the presence of the
conductive object is detected on a second sensing area of the at least two
sensing areas of the sensing device; and

recognizing ~~one or more~~ a third button ~~operations~~ activation when the presence
of the conductive object is detected on the first and second sensing areas.

3. (Currently Amended) The method of claim 1, further comprising ~~determining~~
measuring a capacitance of the conductive object on the sensing device over time,
wherein ~~determining~~ measuring the capacitance further comprises ~~determining~~
measuring a capacitance of the at least two sensing areas of the sensing device, and
wherein recognizing the button ~~operation~~ activation is based on the measured
capacitance of the at least two sensing areas.

4. (Currently Amended) The method of claim 1, further comprising scanning the at least
two sensing areas of the sensing device, and wherein recognizing the ~~three or more~~ a
plurality of button ~~operations~~ activations comprises:

recognizing a first button ~~operation~~ activation when a first sensing area of the at
least two sensing areas detects the presence of the conductive object during
the scanning of the at least two sensing areas;

recognizing a second button ~~operation~~ activation when a second sensing area of the two sensing areas detects the presence of the conductive object during the scanning of the at least two sensing areas; and
recognizing a third button ~~operation~~ activation when the first and second sensing areas detect the presence of the conductive object during the scanning of the at least two sensing areas.

5. (Original) An apparatus, comprising:

a sensing device comprising:

a first sensor element;

a second sensor element; and

a third sensor element comprising a first portion coupled to the first sensor element and a second portion coupled to the second sensor element, wherein the first and second portions of the third sensor element are electrically isolated.

6. (Original) The apparatus of claim 5, wherein a surface area of the first portion and a surface area of the second portion of the third sensor element are substantially equal.

7. (Original) The apparatus of claim 5, further comprising a fourth sensor element comprising a third portion coupled to the first sensor element and a fourth portion coupled to the second sensor element, wherein the third and fourth portions of the fourth sensor element are electrically isolated.

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8. (Original) The apparatus of claim 7, wherein a surface area ratio of the third sensor element is approximately 25% of the first portion to approximately 75% of the second portion, and wherein a surface area ratio of the fourth sensor element is approximately 75% of the third portion to approximately 25% of the fourth portion.

9. (Original) The apparatus of claim 5, further comprising a fifth sensor element comprising a fifth portion coupled to the first sensor element and a sixth portion coupled to the second sensor element, wherein the fifth and sixth portions of the fifth sensor element are electrically isolated.

10. (Original) The apparatus of claim 9, wherein a surface area ratio of the third sensor element is approximately 33% of the first portion to approximately 67% of the second portion, wherein a surface area ratio of the fourth sensor element is approximately 50% of the third portion to approximately 50% of the fourth portion, and wherein a surface area ratio of the fifth sensor element is approximately 67% of the fifth portion to approximately 33% of the sixth portion.

11. (Original) The apparatus of claim 5, wherein the first portion comprises a first conductive trace having one or more sub-traces, and the second portion comprises a second conductive trace having one or more sub-traces, and wherein at least one sub-trace of the first conductive trace is interleaved with at least one sub-trace of the second conductive trace.

12. (Original) The apparatus of claim 5, wherein the first, second, and third sensor elements are substantially circular shaped.

13. (Original) The apparatus of claim 5, wherein the first, second, and third sensor elements are substantially rectangular shaped.

14. (Original) The apparatus of claim 5, further comprising a processing device coupled to the sensing device, wherein the processing device comprises one or more capacitance sensors coupled to the first and second sensor elements, and wherein the one or more capacitance sensors are operable to measure capacitance on the first, second, and third sensor elements.

15. (Original) The apparatus of claim 14, wherein the processing device comprises a first pin and a second pin, wherein the first pin is coupled to the first sensor element, and wherein the second pin is coupled to the second sensor element.

16. (Original) The apparatus of claim 15, wherein the processing device is operable to recognize a first button operation on the first sensor element, a second button operation on the second sensor element, and a third button operation on the first and second portions of the third sensor element.

17. (Original) The apparatus of claim 14, wherein each of the one or more capacitance sensors comprises a relaxation oscillator coupled to one of the first sensor element and

the first portion, and the second sensor element and the second portion, wherein the relaxation oscillator comprises:

a current source to provide a charge current to first sensor element and the first portion, and to the second sensor element and the second portion;

a selection circuit coupled to the first sensor element and the first portion, the second sensor element and the second portion, and the current source, wherein the selection circuit is configured to sequentially select a sensor element of the first sensor element and the second sensor elements to provide the charge current and to measure the capacitance of each sensor element of the sensing device;

a comparator coupled to the current source and the selection circuit, wherein the comparator is configured to compare a voltage on the selected sensor element and a threshold voltage; and

a reset switch coupled to the comparator, current source, and selection circuit, wherein the reset switch is configured to reset the charge current on the selected sensor element, and wherein each of the one or more capacitance sensors further comprises a digital counter coupled to the relaxation oscillator, and wherein the digital counter is operable to count at least one of a frequency or a period of a relaxation oscillator output received from the relaxation oscillator.

18. (Currently Amended) An apparatus, comprising:

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a first sensing area configured to detect a presence of a conductive object on a sensing device;

a second sensing area configured to detect the presence of the conductive object on the sensing device; and

means for recognizing three or more button ~~operations~~ activations performed by the conductive object using ~~two~~ the first and second sensing areas on the sensing device.

19. (Original) The apparatus of claim 18, further comprising means for reducing a pin count of the sensing device.

20. (Original) The apparatus of claim 18, further comprising means for reducing scan time of the sensing device.

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.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 11/437,517		Filing Date 05/18/2006		<input type="checkbox"/> To be Mailed			
APPLICATION AS FILED – PART I											
(Column 1)			(Column 2)			SMALL ENTITY <input type="checkbox"/>		OR		OTHER THAN SMALL ENTITY	
FOR		NUMBER FILED	NUMBER EXTRA		RATE (\$)	FEE (\$)	OR		RATE (\$)	FEE (\$)	
<input type="checkbox"/> BASIC FEE <small>(37 CFR 1.16(a), (b), or (c))</small>		N/A	N/A		N/A				N/A		
<input type="checkbox"/> SEARCH FEE <small>(37 CFR 1.16(k), (l), or (m))</small>		N/A	N/A		N/A		N/A				
<input type="checkbox"/> EXAMINATION FEE <small>(37 CFR 1.16(o), (p), or (q))</small>		N/A	N/A		N/A		N/A				
TOTAL CLAIMS <small>(37 CFR 1.16(i))</small>		minus 20 =	*		X \$ =		OR		X \$ =		
INDEPENDENT CLAIMS <small>(37 CFR 1.16(h))</small>		minus 3 =	*		X \$ =		OR		X \$ =		
<input type="checkbox"/> APPLICATION SIZE FEE <small>(37 CFR 1.16(s))</small>		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 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).									
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT <small>(37 CFR 1.16(j))</small>											
* If the difference in column 1 is less than zero, enter "0" in column 2.											
APPLICATION AS AMENDED – PART II					SMALL ENTITY		OR		OTHER THAN SMALL ENTITY		
(Column 1)			(Column 2)		(Column 3)		OR				
AMENDMENT	11/03/2010	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)					ADDITIONAL FEE (\$)
	Total <small>(37 CFR 1.16(i))</small>	* 20	Minus	** 20	= 0	X \$ =		OR	X \$2=	0	
	Independent <small>(37 CFR 1.16(h))</small>	* 3	Minus	***3	= 0	X \$ =		OR	X \$220=	0	
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>										
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>										
						TOTAL ADD'L FEE	OR		TOTAL ADD'L FEE	0	
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR		RATE (\$)	ADDITIONAL FEE (\$)
	Total <small>(37 CFR 1.16(i))</small>	*	Minus	**	=	X \$ =		OR		X \$ =	
	Independent <small>(37 CFR 1.16(h))</small>	*	Minus	***	=	X \$ =		OR		X \$ =	
	<input type="checkbox"/> Application Size Fee <small>(37 CFR 1.16(s))</small>										
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <small>(37 CFR 1.16(j))</small>										
						TOTAL ADD'L FEE	OR		TOTAL ADD'L FEE		
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.											
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".											
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".											
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.											

Legal Instrument Examiner:
/Halley D. Massey/

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Jiang XiaoPing

Examiner: Benyan Ketema

Serial No.: 11/437,517

Group Art Unit: 2629

Filed: May 18, 2006

Docket No.: CD06039

Title: Two-Pin Buttons

Confirmation No.: 2623

Assignee: Cypress Semiconductor

SUPPLEMENTAL RESPONSE TO OCTOBER 25, 2010 RESPONSE TO NON-FINAL OFFICE ACTION DATED AUGUST 3, 2010

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

Dear Sir:

Amendments to the present application and/or associated remarks are detailed below.

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1

CLAIMS**Claims pending**

- At time of the Action: 1-20.
- After this Response: 1-20.
- Currently Amended claims:** 1-4 and 18.
- Currently Cancelled claims:** None.
- Currently Withdrawn claims:** None.
- New claims:** None.

1. (Currently Amended) A method, comprising:

detecting a presence of a conductive object on a capacitance sensing device, the sensing device comprising at least two sensing areas each coupled to a capacitance measurement input; and recognizing activation of at least three ~~a plurality of buttons activations~~ performed by the detected presence of the conductive object, wherein the ~~plurality~~ number of button buttons activations is equal to at least the number or sensing areas plus one and wherein a combination of the at least two sensing areas is used to recognize at least one of the ~~plurality of activated button buttons operations~~.

2. (Currently Amended) The method of claim 1, wherein recognizing the plurality of button activations comprises:

recognizing a first activated ~~button activation~~ when the presence of the conductive object is detected on a first sensing area of the at least two sensing areas of the sensing device;

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recognizing a second activated button ~~activation~~ when the presence of the
 conductive object is detected on a second sensing area of the at least two
 sensing areas of the sensing device; and
 recognizing a third activated button ~~activation~~ when the presence of the
 conductive object is detected on the first and second sensing areas.

3. (Currently Amended) The method of claim 1, further comprising measuring a
 capacitance of the conductive object on the sensing device over time, wherein
 measuring the capacitance further comprises measuring a capacitance of the at least
 two sensing areas of the sensing device, and wherein recognizing the activated button
~~buttons activation~~ is based on the measured capacitance of the at least two sensing
 areas.

4. (Currently Amended) The method of claim 1, further comprising scanning the at least
 two sensing areas of the sensing device, and wherein recognizing the a plurality of
activated button ~~buttons activations~~ comprises:

recognizing a first activated button ~~activation~~ when a first sensing area of the at
 least two sensing areas detects the presence of the conductive object during
 the scanning of the at least two sensing areas;
 recognizing a second activated button ~~activation~~ when a second sensing area of
 the two sensing areas detects the presence of the conductive object during
 the scanning of the at least two sensing areas; and

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recognizing a third activated button activation when the first and second sensing areas detect the presence of the conductive object during the scanning of the at least two sensing areas.

5. (Original) An apparatus, comprising:

a sensing device comprising:

a first sensor element;

a second sensor element; and

a third sensor element comprising a first portion coupled to the first sensor element and a second portion coupled to the second sensor element, wherein the first and second portions of the third sensor element are electrically isolated.

6. (Original) The apparatus of claim 5, wherein a surface area of the first portion and a surface area of the second portion of the third sensor element are substantially equal.

7. (Original) The apparatus of claim 5, further comprising a fourth sensor element comprising a third portion coupled to the first sensor element and a fourth portion coupled to the second sensor element, wherein the third and fourth portions of the fourth sensor element are electrically isolated.

8. (Original) The apparatus of claim 7, wherein a surface area ratio of the third sensor element is approximately 25% of the first portion to approximately 75% of the second

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portion, and wherein a surface area ratio of the fourth sensor element is approximately 75% of the third portion to approximately 25% of the fourth portion.

9. (Original) The apparatus of claim 5, further comprising a fifth sensor element comprising a fifth portion coupled to the first sensor element and a sixth portion coupled to the second sensor element, wherein the fifth and sixth portions of the fifth sensor element are electrically isolated.

10. (Original) The apparatus of claim 9, wherein a surface area ratio of the third sensor element is approximately 33% of the first portion to approximately 67% of the second portion, wherein a surface area ratio of the fourth sensor element is approximately 50% of the third portion to approximately 50% of the fourth portion, and wherein a surface area ratio of the fifth sensor element is approximately 67% of the fifth portion to approximately 33% of the sixth portion.

11. (Original) The apparatus of claim 5, wherein the first portion comprises a first conductive trace having one or more sub-traces, and the second portion comprises a second conductive trace having one or more sub-traces, and wherein at least one sub-trace of the first conductive trace is interleaved with at least one sub-trace of the second conductive trace.

12. (Original) The apparatus of claim 5, wherein the first, second, and third sensor elements are substantially circular shaped.

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13. (Original) The apparatus of claim 5, wherein the first, second, and third sensor elements are substantially rectangular shaped.

14. (Original) The apparatus of claim 5, further comprising a processing device coupled to the sensing device, wherein the processing device comprises one or more capacitance sensors coupled to the first and second sensor elements, and wherein the one or more capacitance sensors are operable to measure capacitance on the first, second, and third sensor elements.

15. (Original) The apparatus of claim 14, wherein the processing device comprises a first pin and a second pin, wherein the first pin is coupled to the first sensor element, and wherein the second pin is coupled to the second sensor element.

16. (Original) The apparatus of claim 15, wherein the processing device is operable to recognize a first button operation on the first sensor element, a second button operation on the second sensor element, and a third button operation on the first and second portions of the third sensor element.

17. (Original) The apparatus of claim 14, wherein each of the one or more capacitance sensors comprises a relaxation oscillator coupled to one of the first sensor element and the first portion, and the second sensor element and the second portion, wherein the relaxation oscillator comprises:

a current source to provide a charge current to first sensor element and the first portion, and to the second sensor element and the second portion;

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a selection circuit coupled to the first sensor element and the first portion, the second sensor element and the second portion, and the current source, wherein the selection circuit is configured to sequentially select a sensor element of the first sensor element and the second sensor elements to provide the charge current and to measure the capacitance of each sensor element of the sensing device;

a comparator coupled to the current source and the selection circuit, wherein the comparator is configured to compare a voltage on the selected sensor element and a threshold voltage; and

a reset switch coupled to the comparator, current source, and selection circuit, wherein the reset switch is configured to reset the charge current on the selected sensor element, and wherein each of the one or more capacitance sensors further comprises a digital counter coupled to the relaxation oscillator, and wherein the digital counter is operable to count at least one of a frequency or a period of a relaxation oscillator output received from the relaxation oscillator.

18. (Currently Amended) An apparatus, comprising:

a first sensing area configured to detect a presence of a conductive object on a sensing device;

a second sensing area configured to detect the presence of the conductive object on the sensing device; and

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January 26, 2010

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means for recognizing three or more activated button buttons activation
performed by the conductive object using ~~two~~ the first and second sensing
areas on the sensing device.

19. (Original) The apparatus of claim 18, further comprising means for reducing a pin
count of the sensing device.

20. (Original) The apparatus of claim 18, further comprising means for reducing scan
time of the sensing device.

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January 26, 2010

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JAN 26 2011

Jennifer Geoffrion

From: Ryan Seguine [rxi@cypress.com]
Sent: Wednesday, January 26, 2011 1:37 PM
To: Jennifer Geoffrion
Subject: Can you please Fax this for me?
Attachments: CD06039 11 437 517 January 27 2010 CLAIMS.pdf



CD06039 11 437
517 January 27 ...

Jennifer,

Can you please fax the attached document to the US Patent and Trademark Office for me?

The number is: 571.273.8300
Contact Name: Examiner Benyam Ketema
Phone number: 571.270.7224
Regarding: Application 11/437,517
From: Ryan Seguine (64,577)
Phone number: 425.753.4459.

Thanks.

Ryan.



NOTICE OF ALLOWANCE AND FEE(S) DUE

60909 7590 02/03/2011

CYPRESS SEMICONDUCTOR CORPORATION
198 CHAMPION COURT
SAN JOSE, CA 95134-1709

EXAMINER

KETEMA, BENYAM

ART UNIT PAPER NUMBER

2629

DATE MAILED: 02/03/2011

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

11/437,517 05/18/2006 Jiang XiaoPing CD06039 2623

TITLE OF INVENTION: TWO-PIN BUTTONS

Table with 7 columns: APPLN. TYPE, SMALL ENTITY, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

nonprovisional NO \$1510 \$300 \$0 \$1810 05/03/2011

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 SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 or Fax (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)

60909 7590 02/03/2011

CYPRESS SEMICONDUCTOR CORPORATION
 198 CHAMPION COURT
 SAN JOSE, CA 95134-1709

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.

Certificate of Mailing or Transmission

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.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/437,517	05/18/2006	Jiang XiaoPing	CD06039	2623

TITLE OF INVENTION: TWO-PIN BUTTONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	05/03/2011

EXAMINER	ART UNIT	CLASS-SUBCLASS
KETEMA, BENYAM	2629	345-173000

<p>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</p> <p><input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</p> <p><input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</p>	<p>2. For printing on the patent front page, list</p> <p>(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____</p> <p>(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. 2 _____</p> <p>3 _____</p>
---	---

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

<p>4a. The following fee(s) are submitted:</p> <p><input type="checkbox"/> Issue Fee</p> <p><input type="checkbox"/> Publication Fee (No small entity discount permitted)</p> <p><input type="checkbox"/> Advance Order - # of Copies _____</p>	<p>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</p> <p><input type="checkbox"/> A check is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input type="checkbox"/> The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).</p>
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5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information 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.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
11/437,517 05/18/2006 Jiang XiaoPing CD06039 2623

60909 7590 02/03/2011

CYPRESS SEMICONDUCTOR CORPORATION
198 CHAMPION COURT
SAN JOSE, CA 95134-1709

EXAMINER

KETEMA, BENYAM

ART UNIT PAPER NUMBER

2629

DATE MAILED: 02/03/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 749 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 749 day(s).

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 Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability	Application No.	Applicant(s)	
	11/437,517	XIAOPING, JIANG	
	Examiner	Art Unit	
	BENYAM KETEMA	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY 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.

1. This communication is responsive to 11/03/2010.
2. The allowed claim(s) is/are 1-20.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - 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)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
|--|--|

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Interview Summary	Application No. 11/437,517	Applicant(s) XIAOPING, JIANG	
	Examiner BENYAM KETEMA	Art Unit 2629	

All participants (applicant, applicant's representative, PTO personnel):

(1) BENYAM KETEMA. (3) _____.

(2) Ryan Sequine. (4) _____.

Date of Interview: 25 January 2011.

Type: a) Telephonic b) Video Conference
c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.
If Yes, brief description: _____.

Claim(s) discussed: 1 and 18.

Identification of prior art discussed: N/A.

Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Examiner discussed a proposed amendment to claims 1 and 18 with Applicant representative Mr. Ryan Sequine on January 25, 2011 and with applicant representative permission examiner faxed the proposed amendment to the applicant representative on January 25, 2011. Applicant's representative agreed with examiners suggestion and informs the examiner that he would need to further review the proposed amendment and will respond to the proposal the next day (January 26, 2011).

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

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. See Summary of Record of Interview requirements on reverse side or on attached sheet.

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.

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ryan Seguire on January 25, 2011.

In the claims:

Please amend claims 1- 4 and 18 as follows:

Claim 1:

A method, comprising:

detecting a presence of a conductive object on a capacitance sensing device, the sensing device comprising at least two sensing areas each coupled to a capacitance measurement input; and

recognizing activation of at least three ~~a plurality of button activations~~ performed by the detected presence of the conductive object, wherein the ~~plurality~~ number of ~~button buttons activations~~ is equal to at least the number of sensing areas plus one and

wherein a combination of the at least two sensing areas is used to recognize at least one of the ~~plurality of~~ activated button ~~buttons~~ ~~operations~~.

Claim 2:

The method of claim 1, wherein recognizing the plurality of button activations comprises:

recognizing a first activated button ~~activation~~ when the presence of the conductive object is detected on a first sensing area of the at least two sensing areas of the sensing device;

recognizing a second activated button ~~activation~~ when the presence of the conductive object is detected on a second sensing area of the at least two sensing areas of the sensing device; and

recognizing a third activated button ~~activation~~ when the presence of the conductive object is detected on the first and second sensing areas.

Claim 3:

The method of claim 1, further comprising measuring a capacitance of the conductive object on the sensing device over time, wherein measuring the capacitance further comprises measuring a capacitance of the at least two sensing areas of the sensing device, and wherein recognizing the activated button ~~buttons~~ ~~activation~~ is based on the measured capacitance of the at least two sensing areas.

Claim 4:

The method of claim 1, further comprising scanning the at least two sensing areas of the sensing device, and wherein recognizing the a plurality of activated button buttons ~~activations~~ comprises:

recognizing a first activated button ~~activation~~ when a first sensing area of the at least two sensing areas detects the presence of the conductive object during the scanning of the at least two sensing areas;

recognizing a second activated button ~~activation~~ when a second sensing area of the two sensing areas detects the presence of the conductive object during the scanning of the at least two sensing areas; and

recognizing a third activated button ~~activation~~ when the first and second sensing areas detect the presence of the conductive object during the scanning of the at least two sensing areas.

Claim 18:

An apparatus, comprising:

a first sensing area configured to detect a presence of a conductive object on a sensing device;

a second sensing area configured to detect the presence of the conductive object on the sensing device; and

means for recognizing three or more activated button buttons ~~activation~~ performed by the conductive object using the first and second sensing areas on the sensing device.

Examiner's Statement of Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance: The prior art of record fails to disclose the claimed invention. **The features of independent claim 1** directed towards allowable subject matter is "*detecting a presence of a conductive object on a capacitance sensing device, the sensing device comprising at least two sensing areas each coupled to a capacitance measurement input; and recognizing activation of at least three button performed by the detected presence of the conductive object, wherein the number of buttons is equal to at least the number of sensing areas plus one and wherein a combination of the at least two sensing areas is used to recognize at least one of the activated buttons*". **Tsujioka et al (US Pat NO 5,518,078)** discloses that the presence of users finger (i.e. conductive object) is detected by sensing device (col. 9- 10), the sensing device comprising at least two sensing areas each coupled to a capacitance measurement input (fig 5 & 6) wherein the user can perform multiple input operation using his/her finger or pen as it is clearly shown in fig 5 in order to perform an input operation. But Tsujioka et al fails to disclose **the number of buttons is equal to at least the number of sensing areas plus one** and wherein a **combination of the at least two sensing areas is used to recognize at least one of the activated buttons.** These features in combination with the remaining language of claim 1, are not taught by the prior art of record.

The prior art of record fails to disclose the claimed invention. **The features of independent claim 5** directed towards allowable subject matter is "*a first sensor*

element; a second sensor elements; and a third sensor element comprising a first portion coupled to the first sensor element and second portion coupled to the second sensor element, wherein the first and second portions of the third sensor element are electrically isolated. **Tsujioka et al (US Pat NO 5,518,078)** discloses a device having multiple sensor elements, but fails to disclose a third sensor element comprising a first portion coupled to the first sensor element and second portion coupled to the second sensor element. These features in combination with the remaining language of claims 1, 5, are not taught by the prior art of record. Therefore claims 1- 9 are found to be allowable over the prior art of record.

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."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENYAM KETEMA whose telephone number is (571)270-7224. The examiner can normally be reached on Monday- Friday 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shalwala Bipin H can be reached on 571-272-7681. 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.

/ B.K. /

Examiner, Art Unit 2629

/Bipin Shalwala/

Supervisory Patent Examiner, Art Unit 2629

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)	
Jiang XiaoPing)	Examiner: KETEMA, BENYAM
Application No.: 11/437,517)	Group Art Unit: 2629
Filed: May 18, 2006)	Confirmation No.: 2623
For: TWO-PIN BUTTONS)	
)	

**REQUEST FOR CONTINUED EXAMINATION
AND INFORMATION DISCLOSURE STATEMENT**

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

Sir:

Applicant hereby submits the Request for Continued Examination to be considered with the IDS for the above referenced application. In compliance with the duty of disclosure under 37 CFR § 1.56 and in accordance with the practice under 37 CFR §§ 1.97 and 1.98, the Examiner's attention is directed to the documents listed on the enclosed PTO-1449.

In accordance with 37 CFR § 1.97(h), this Information Disclosure Statement is not to be construed as an admission that the information cited is or is considered to be material to patentability as defined in 37 CFR § 1.56(b), nor as an admission that the information constitutes prior art within the meaning of 35 USC §§ 102 and/or 103.

It is respectfully requested that the information listed on the PTO-1449 be considered by the Examiner, and that an initialed copy of the PTO-1449 be returned indicating that such information was considered.

Customer No.: 60909

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, 1.18, 1.20 and 1.21 that may be required to maintain pendency of the present application, and to credit any overpayments, to Deposit Account No. 50-3781.

Should the Patent Office have any questions regarding this submission or the application in general, the Patent Office is urged to contact the Applicant's attorney, Larry Johnson, by telephone at (408) 545-7194. All correspondence should continue to be directed to the address given below.

/

/

Respectfully submitted,

Date: 05/03/2011

By: /Larry Johnson/

Larry Johnson
Attorney for Applicant
Registration No. 56,861

Cypress Semiconductor Corporation
198 Champion Court
San Jose, CA 95134
Facsimile: (408) 545-6911
Customer No.: 60909

Customer No.: 60909



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

NOTICE OF ALLOWANCE AND FEE(S) DUE

60909 7590 05/19/2011
CYPRESS SEMICONDUCTOR CORPORATION
198 CHAMPION COURT
SAN JOSE, CA 95134-1709

EXAMINER

KETEMA, BENYAM

ART UNIT PAPER NUMBER

2629

DATE MAILED: 05/19/2011

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

11/437,517 05/18/2006 Jiang XiaoPing CD06039 2623

TITLE OF INVENTION: TWO-PIN BUTTONS

Table with 7 columns: APPLN. TYPE, SMALL ENTITY, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

nonprovisional NO \$1510 \$300 \$0 \$1810 08/19/2011

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 SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 or Fax (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)

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.

60909 7590 05/19/2011
CYPRESS SEMICONDUCTOR CORPORATION
 198 CHAMPION COURT
 SAN JOSE, CA 95134-1709

Certificate of Mailing or Transmission
 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.

_____ (Depositor's name)
_____ (Signature)
_____ (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/437,517	05/18/2006	Jiang XiaoPing	CD06039	2623

TITLE OF INVENTION: TWO-PIN BUTTONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/19/2011

EXAMINER	ART UNIT	CLASS-SUBCLASS
KETEMA, BENYAM	2629	345-173000

<p>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</p> <p><input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</p> <p><input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</p>	<p>2. For printing on the patent front page, list</p> <p>(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____</p> <p>(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. 2 _____</p> <p>3 _____</p>
---	---

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

<p>4a. The following fee(s) are submitted:</p> <p><input type="checkbox"/> Issue Fee</p> <p><input type="checkbox"/> Publication Fee (No small entity discount permitted)</p> <p><input type="checkbox"/> Advance Order - # of Copies _____</p>	<p>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</p> <p><input type="checkbox"/> A check is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input type="checkbox"/> The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).</p>
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5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information 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.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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60909 7590 05/19/2011
CYPRESS SEMICONDUCTOR CORPORATION
198 CHAMPION COURT
SAN JOSE, CA 95134-1709

EXAMINER

KETEMA, BENYAM

ART UNIT PAPER NUMBER

2629

DATE MAILED: 05/19/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 749 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 749 day(s).

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 Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

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.
2. 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).
5. 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.

Notice of Allowability	Application No.	Applicant(s)	
	11/437,517	XIAOPING, JIANG	
	Examiner	Art Unit	
	BENYAM KETEMA	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY 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.

1. This communication is responsive to 05/03/2011.
2. The allowed claim(s) is/are 1-20.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - 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)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>05/03/2011</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
|---|---|

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DETAILED ACTION

Information Disclosure Statement

1. Due to the excessively lengthy Information Disclosure Statement submitted by applicant, the examiner has given only a cursory review of the listed references. In accordance with MPEP 609.04(a), applicant is encouraged to provide a concise explanation of why the information is being submitted and how it is understood to be relevant. Concise explanations (especially those which point out the relevant pages and lines) are helpful to the Office, particularly where documents are lengthy and complex and applicant is aware of a section that is highly relevant to patentability or where a large number of documents are submitted and applicant is aware that one or more are highly relevant to patentability. Applicant is required to comply with this statement for any non-English language documents. See 37 CFR § 1.56 Duty to Disclose Information Material to Patentability.

Examiner's Statement of Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance: The prior art of record fails to disclose the claimed invention. **The features of independent claim 1** directed towards allowable subject matter is "*detecting a presence of a conductive object on a capacitance sensing device, the sensing device comprising at least two*

Art Unit: 2629

sensing areas each coupled to a capacitance measurement input; and recognizing activation of at least three button performed by the detected presence of the conductive object, wherein the number of buttons is equal to at least the number of sensing areas plus one and wherein a combination of the at least two sensing areas is used to recognize at least one of the activated buttons". **Tsujioka et al (US Pat NO 5,518,078)** discloses that the presence of users finger (i.e. conductive object) is detected by sensing device (col. 9- 10), the sensing device comprising at least two sensing areas each coupled to a capacitance measurement input (fig 5 & 6) wherein the user can perform multiple input operation using his/her finger or pen as it is clearly shown in fig 5 in order to perform an input operation. But **Tsujioka et al** fails to disclose **the number of buttons is equal to at least the number of sensing areas plus one** and wherein a **combination of the at least two sensing areas is used to recognize at least one of the activated buttons.** These features in combination with the remaining language of claim 1, are not taught by the prior art of record.

The prior art of record fails to disclose the claimed invention. **The features of independent claim 5** directed towards allowable subject matter is " *a first sensor element; a second sensor elements; and a third sensor element comprising a first portion coupled to the first sensor element and second portion coupled to the second sensor element, wherein the first and second portions of the third sensor element are electrically isolated.* **Tsujioka et al (US Pat NO 5,518,078)** discloses a device having multiple sensor elements, but fails to disclose **a third sensor element comprising a first portion coupled to the first sensor element and second portion coupled to the second**

sensor element. These features in combination with the remaining language of claims 1, 5, are not taught by the prior art of record. Therefore claims 1- 9 are found to be allowable over the prior art of record.

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."

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENYAM KETEMA whose telephone number is (571)270-7224. The examiner can normally be reached on Monday- Friday 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shalwala Bipin H can be reached on 571-272-7681. 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

Application/Control Number: 11/437,517

Page 5

Art Unit: 2629

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.

/ B.K. /

Examiner, Art Unit 2629

/Bipin Shalwala/

Supervisory Patent Examiner, Art Unit 2629

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Jiang Xiaoping) Examiner: Benyam Ketema
Application No.: 11/437,517) Group Art Unit: 2629
Filed: May 18, 2006) Confirmation No.: 2623
For: Two-pin buttons)
)

**REQUEST FOR CONTINUED EXAMINATION
AND INFORMATION DISCLOSURE STATEMENT**

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

Sir:

Applicant hereby submits the Request for Continued Examination to be considered with the IDS for the above referenced application. In compliance with the duty of disclosure under 37 CFR § 1.56 and in accordance with the practice under 37 CFR §§ 1.97 and 1.98, the Examiner's attention is directed to the documents listed on the enclosed PTO-1449.

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Customer No.: 60909

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, 1.18, 1.20 and 1.21 that may be required to maintain pendency of the present application, and to credit any overpayments, to Deposit Account No. 50-3781.

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/

/

Respectfully submitted,

Date: 05/25/2011

By: /Larry Johnson/

Larry Johnson
Attorney for Applicant
Registration No. 56,861

Cypress Semiconductor Corporation
198 Champion Court
San Jose, CA 95134
Facsimile: (408) 545-6911
Customer No.: 60909

Customer No.: 60909



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

NOTICE OF ALLOWANCE AND FEE(S) DUE

60909 7590 06/16/2011
CYPRESS SEMICONDUCTOR CORPORATION
198 CHAMPION COURT
SAN JOSE, CA 95134-1709

EXAMINER

KETEMA, BENYAM

ART UNIT PAPER NUMBER

2629

DATE MAILED: 06/16/2011

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

11/437,517 05/18/2006 Jiang XiaoPing CD06039 2623

TITLE OF INVENTION: TWO-PIN BUTTONS

Table with 7 columns: APPLN. TYPE, SMALL ENTITY, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

nonprovisional NO \$1510 \$300 \$0 \$1810 09/16/2011

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.

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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

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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.

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60909 7590 06/16/2011
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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.

Certificate of Mailing or Transmission
 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.

_____ (Depositor's name)
_____ (Signature)
_____ (Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/437,517	05/18/2006	Jiang XiaoPing	CD06039	2623

TITLE OF INVENTION: TWO-PIN BUTTONS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	09/16/2011

EXAMINER	ART UNIT	CLASS-SUBCLASS
KETEMA, BENYAM	2629	345-173000

<p>1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).</p> <p><input type="checkbox"/> Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.</p> <p><input type="checkbox"/> "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.</p>	<p>2. For printing on the patent front page, list</p> <p>(1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____</p> <p>(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. 2 _____</p> <p>3 _____</p>
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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

<p>4a. The following fee(s) are submitted:</p> <p><input type="checkbox"/> Issue Fee</p> <p><input type="checkbox"/> Publication Fee (No small entity discount permitted)</p> <p><input type="checkbox"/> Advance Order - # of Copies _____</p>	<p>4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)</p> <p><input type="checkbox"/> A check is enclosed.</p> <p><input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.</p> <p><input type="checkbox"/> The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).</p>
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5. Change in Entity Status (from status indicated above)

a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information 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.

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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
Values: 11/437,517, 05/18/2006, Jiang XiaoPing, CD06039, 2623

60909 7590 06/16/2011
CYPRESS SEMICONDUCTOR CORPORATION
198 CHAMPION COURT
SAN JOSE, CA 95134-1709

EXAMINER

KETEMA, BENYAM

ART UNIT PAPER NUMBER

2629

DATE MAILED: 06/16/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 749 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 749 day(s).

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 Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

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.
2. 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).
5. 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.

Notice of Allowability	Application No.	Applicant(s)	
	11/437,517	XIAOPING, JIANG	
	Examiner	Art Unit	
	BENYAM KETEMA	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY 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.

1. This communication is responsive to 05/27.
2. The allowed claim(s) is/are 1-20.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - 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)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>05/27/2011</u> 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
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DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on May 27, 2011 was filed after the mailing date of the Notice of Allowance on May 19, 2011. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Examiner's Statement of Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance: The prior art of record fails to disclose the claimed invention. **The features of independent claim 1** directed towards allowable subject matter is "*detecting a presence of a conductive object on a capacitance sensing device, the sensing device comprising at least two sensing areas each coupled to a capacitance measurement input; and recognizing activation of at least three button performed by the detected presence of the conductive object, wherein the number of buttons is equal to at least the number of sensing areas plus one and wherein a combination of the at least two sensing areas is used to recognize at least one of the activated buttons*". **Tsujioka et al (US Pat NO 5,518,078)** discloses that the presence of users finger (i.e. conductive object) is detected by sensing device (col. 9- 10), the sensing device comprising at least two sensing areas each coupled to a capacitance measurement input (fig 5 & 6) wherein the user can

perform multiple input operation using his/her finger or pen as it is clearly shown in fig 5 in order to perform an input operation. But Tsujioka et al fails to disclose **the number of buttons is equal to at least the number of sensing areas plus one** and wherein a combination of the at least two sensing areas is used to recognize at least one of the activated buttons. These features in combination with the remaining language of claim 1, are not taught by the prior art of record.

The prior art of record fails to disclose the claimed invention. **The features of independent claim 5** directed towards allowable subject matter is “ *a first sensor element; a second sensor elements; and a third sensor element comprising a first portion coupled to the first sensor element and second portion coupled to the second sensor element, wherein the first and second portions of the third sensor element are electrically isolated.* **Tsujioka et al (US Pat NO 5,518,078)** discloses a device having multiple sensor elements, but fails to disclose a third sensor element comprising a first portion coupled to the first sensor element and second portion coupled to the second sensor element. These features in combination with the remaining language of claims 1, 5, are not taught by the prior art of record. Therefore claims 1- 9 are found to be allowable over the prior art of record.

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.”

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENYAM KETEMA whose telephone number is (571)270-7224. The examiner can normally be reached on Monday- Friday 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shalwala Bipin H can be reached on 571-272-7681. 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.

/ B.K. /

Examiner, Art Unit 2629

/Bipin Shalwala/

Supervisory Patent Examiner, Art Unit 2629

Application/Control Number: 11/437,517
Art Unit: 2629

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