UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
SAMSUNG ELECTRONICS CO., LTD.; AND
SAMSUNG ELECTRONICS AMERICA, INC. Petitioner
V.
IMAGE PROCESSING TECHNOLOGIES, LLC Patent Owner
Patent No. 8,983,134

PETITION FOR INTER PARTES REVIEW OF U.S. PATENT NO. 8,983,134



## TABLE OF CONTENTS

## Contents

I.	INTR	RODU	CTION	1
II.	MAN	NDAT(	ORY NOTICES UNDER 37 C.F.R. § 42.8	1
III.	PAY	MENT	OF FEES UNDER 37 C.F.R. § 42.15(a)	3
IV.	GRO	UNDS	FOR STANDING.	3
V.	PREC	CISE R	RELIEF REQUESTED	3
VI.	LEG	AL ST	ANDARDS	3
	A.	Clain	n Construction	3
	B.	Leve	Of Ordinary Skill In The Art	4
	C.	This	Petition Is Not Redundant	5
VII.			W OF THE RELEVANT TECHNOLOGY AND '134	6
VIII.	DET	AILED	EXPLANATION OF GROUNDS	12
	A.	Over	view Of The Prior Art References	12
		1.	U.S. Patent No. 5,481,622 to Gerhardt (Ex. 1013)	12
		2.	U.S. Patent No. 6,044,166 to Bassman (Ex. 1014)	19
		3.	Alton L. Gilbert et al., <i>A Real-Time Video Tracking System</i> , PAMI-2 No. 1 IEEE Transactions on Pattern Analysis and Machine Intelligence 47 (Jan. 1980) ("Gilbert") (Ex. 1005)	21
		4.	U.S. Patent No. 5,521,843 ("Hashima") (Ex. 1006)	30
IX.	Speci	ific Ex	planation Of Grounds For Invalidity	37
	A.		nd 1: Gerhardt In View Of Bassman Renders Obvious The enged Claims	37



1.	Reasons To Combine Gerhardt And Bassman	37
2.	Elements Incorporated Into Claims 3-6 As Claims Dependent From An Independent Claim	39
3.	Claim 3: "The process according to claim 1, wherein said image processing system comprises at least one component selected from a memory, a temporal processing unit, and a spatial processing unit"	46
4.	Claim 4: "The process according to claim 1, wherein forming the at least one histogram further comprises successively increasing the size of a selected area until the boundary of the target is found"	51
5.	Claim 5: "The process according to claim 4, wherein forming the at least one histogram further comprises adjusting a center of the selected area based upon a shape of the target until substantially the entire target is within the selected area"	52
6.	Claim 6: "The process according to claim 5, wherein forming the at least one histogram further comprises setting the X minima and maxima and Y minima and maxima as boundaries in X and Y histogram formation units such that only pixels within the selected area will be processed by the image processing system"	54
7.	Gerhardt and Bassman Are Not Cumulative	54
	nd 2: Gilbert In View Of Gerhardt And Further In View ashima Renders Obvious The Challenged Claims	55
1.	Reasons To Combine Gilbert, Gerhardt, And Hashima	55
2.	Elements Incorporated Into Claims 3-6 As Claims Dependent From An Independent Claim	59
3.	Claim 3: "The process according to claim 1, wherein said image processing system comprises at least one component selected from a memory, a temporal processing unit, and a spatial processing unit."	69



B.

	4.	Claim 4: "The process according to claim 1, wherein forming the at least one histogram further comprises successively increasing the size of a selected area until the boundary of the target is found"	73
	5.	Claim 5: "The process according to claim 4, wherein forming the at least one histogram further comprises adjusting a center of the selected area based upon a shape of the target until substantially the entire target is within the selected area".	76
	6.	Claim 6: "The process according to claim 5, wherein forming the at least one histogram further comprises setting the X minima and maxima and Y minima and maxima as boundaries in X and Y histogram formation units such that only pixels within the selected area will be processed by the image processing system"	78
	7.	Gilbert, Gerhardt, and Hashima Are Not Cumulative	79
X	CONCLUS	ION	80



## LIST OF EXHIBITS<sup>1</sup>

1001	U.S. Patent No. 8,983,134 ("the '134 patent")
1002	Declaration of Dr. John C. Hart
1003	Curriculum Vitae for Dr. John C. Hart
1004	Prosecution File History of U.S. Patent No. 8,983,134
1005	Alton L. Gilbert et al., A Real-Time Video Tracking System,
	PAMI-2 No. 1 IEEE Transactions on Pattern Analysis and
	Machine Intelligence 47 (Jan. 1980) ("Gilbert")
1006	U.S. Patent 5,521,843 ("Hashima")
1007	Reserved
1008	D. Trier, A. K. Jain and T. Taxt, "Feature Extraction Methods
	for Character Recognition-A Survey", Pattern Recognition, vol.
	29, no. 4, 1996
1009	M. H. Glauberman, "Character recognition for business
	machines," Electronics, vol. 29, pp. 132(136), Feb. 1956
1010	Declaration of Gerard P. Grenier (authenticating Ex. 1005)
1011	Reserved
1012	Reserved
1013	U.S. Patent No. 5,481,622 to Gerhardt
1014	U.S. Patent No. 6.044,166 to Bassman
1015	Reserved
1016	Reserved
1017	Reserved
1018	Reserved
1019	Reserved
1020	Reserved
1021	Reserved
1022	Prosecution File History of U.S. Patent No. 8,805,001



<sup>&</sup>lt;sup>1</sup> Citations to non-patent publications are to the original page numbers of the publication, and citations to U.S. patents are to column:line number of the patents.

# DOCKET

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

#### **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

#### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

#### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

#### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

#### **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

