

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.; and
SAMSUNG ELECTRONICS AMERICA, INC.
Petitioners

v.

IMAGE PROCESSING TECHNOLOGIES, LLC
Patent Owner

Patent No. 8,989,445

**DECLARATION OF DR. JOHN C. HART
IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 8,989,445**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	BACKGROUND AND EXPERIENCE	1
	A. Qualifications	1
	B. Previous Testimony	4
III.	TECHNOLOGICAL BACKGROUND.....	5
IV.	THE '445 Patent	11
V.	SUMMARY OF OPINIONS	22
VI.	LEVEL OF ORDINARY SKILL IN THE ART	24
VII.	CLAIM CONSTRUCTION.....	24
VIII.	THE PRIOR ART TEACHES OR SUGGESTS EVERY STEP AND FEATURE OF THE CHALLENGED CLAIMS OF THE '445 PATENT	25
	A. Overview Of The Prior Art References	25
	1. U.S. Patent No. 5,481,622 (“Gerhardt”) (Ex. 1013).....	25
	2. U.S. Patent No. 6,044,166 (“Bassman”) (Ex. 1014).....	31
	3. U.S. Patent No. 5,764,786 (“Kuwashima”) (Ex. 1015).....	34
	4. Berthold K.P. Horn and Brian G. Schunck, Determining Optical Flow, SPIE Techniques and Applications of Image Understanding 281, 1981, at 319 (“Horn”) (Ex. 1016).....	39
	5. U.S. Patent No. 5, 748,775 (“Tsuchikawa”) (Ex. 1017).....	44
	B. Gerhardt In View Of Bassman Teaches Or Suggests Every Step And Feature Of Unchallenged Claims From Which Dependent Claims Depend	49
	1. Reasons To Combine Gerhardt and Bassman.....	49
	2. Elements Incorporated Into Claims 2, 3, 5, 7, 8, 10-17, And 19 From Claims On Which These Claims Depend.....	51
	3. Elements Incorporated Into Claims 26, 28, 29, And 30 From Claims On Which These Claims Depend	58

Declaration of Dr. John C. Hart
Inter Partes Review of U.S. Patent No. 8,989,445

C.	Ground 1: Gerhardt In View Of Bassman Renders Obvious Claims 3, 5, 7, 8, 14-17, 26, 28, and 29	62
1.	Reasons To Combine Gerhardt And Bassman.....	62
2.	Claim 3.....	62
3.	Elements Incorporated Into Claims 5, 7, And 8 From Claims On Which these Claims Depend.....	63
4.	Claim 5.....	65
5.	Claim 7.....	66
6.	Claim 8.....	67
7.	Claim 14.....	68
8.	Claim 15.....	69
9.	Claim 16.....	69
10.	Claim 17.....	70
11.	Claim 26.....	71
12.	Claim 28.....	72
13.	Claim 29.....	73
D.	Ground 2: Gerhardt In View Of Bassman And Further In View Of Horn And The Knowledge Of A POSA Teaches Or Suggests Every Step And Feature Of Claims 2, 10, And 11	75
1.	Reasons To Combine Gerhardt With Bassman And Further With Horn	75
2.	Claim 2.....	77
3.	Claim 10.....	78
4.	Claim 11.....	79
E.	Ground 3: Gerhardt In View Of Bassman And Further In View Of Tsuchikawa And The Knowledge Of A POSA Teaches Or Suggests Every Step And Feature Of Claims 3, 12, and 13	83
1.	Reasons To Combine Gerhardt With Bassman And Further With Tsuchikawa	83

Declaration of Dr. John C. Hart
Inter Partes Review of U.S. Patent No. 8,989,445

2.	Claim 3.....	85
3.	Claim 12.....	85
4.	Claim 13.....	87
F.	Ground 4: Gerhardt In View Of Bassman And Further In View Of Kuwashima And The Knowledge Of A POSA Teaches Or Suggests Every Step And Feature Of Claims 19-22, and 30.....	89
1.	Reasons To Combine Gerhardt With Bassman And Further With Kuwashima	89
2.	Claim 19.....	90
3.	Claim 20.....	93
4.	Claim 21.....	97
5.	Claim 22.....	98
6.	Claim 23.....	99
7.	Claim 30.....	100
IX.	Detailed Application Of Gerhardt, Bassman, Tsuchikawa, And Kuwashima To The Challenged Claims.....	100
X.	CONCLUSION.....	202

1. I, John C. Hart, declare as follows:

I. INTRODUCTION

2. I have been retained by Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (collectively, “Petitioner”) as an independent expert consultant in this proceeding before the United States Patent and Trademark Office (“PTO”).

3. I have been asked to consider whether certain references teach or suggest the features recited in Claims 2, 3, 5, 7, 8, 10-17, 19-23, 26, and 28-30 (the “Challenged Claims”) of U.S. Patent No. 8,989,445 (“the ’445 Patent”) (Ex. 1001), which I understand is allegedly owned by Image Processing Technologies, LLC (“Patent Owner”). My opinions and the bases for my opinions are set forth below.

4. I am being compensated at my ordinary and customary consulting rate for my work.

5. My compensation is in no way contingent on the nature of my findings, the presentation of my findings in testimony, or the outcome of this or any other proceeding. I have no other interest in this proceeding.

II. BACKGROUND AND EXPERIENCE

A. Qualifications

6. I have more than 25 years of experience in computer graphics and image processing technologies. In particular, I have devoted much of my career to

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.