Case: 12-1548 Document: 176 Page: 1 Filed: 04/25/2013

NONCONFIDENTIAL Nos. 2012-1548, 2012-1549

#### UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

APPLE INC. AND NEXT SOFTWARE, INC., (formerly known as NeXT Computer, Inc.)

– v. —

Plaintiffs-Appellants,

MOTOROLA, INC., (now known as Motorola Solutions, Inc.) AND MOTOROLA MOBILITY, INC.

Defendants-Cross-Appellants.

Appeals from the United States District Court for the Northern District of Illinois, Case No. 11-CV-8540, Judge Richard A. Posner

#### RESPONSE AND REPLY BRIEF OF PLAINTIFFS-APPELLANTS APPLE INC. AND NEXT SOFTWARE, INC.

Brian E. Ferguson Weil, Gotshal & Manges LLP 1300 Eye Street, N.W. Suite 900 Washington, DC 20005

Matthew D. Powers Tensegrity Law Group LLP 555 Twin Dolphin Drive Suite 360 Redwood Shores, CA 94065 E. Joshua Rosenkranz Orrick, Herrington & Sutcliffe LLP 51 West 52nd Street New York, NY 10019 (212) 506-5000

Mark S. Davies Rachel M. McKenzie T. Vann Pearce, Jr. Orrick, Herrington & Sutcliffe LLP 1152 15th Street, N.W. Washington, DC 20005

Attorneys for Plaintiffs-Appellants

#### **CERTIFICATE OF INTEREST**

Counsel for appellants certify the following:

1. We represent APPLE INC. and NEXT SOFTWARE, INC.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented: Not applicable.

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented: None. Apple Inc. has no parent corporation. According to Apple's Proxy Statement filed with the United States Securities and Exchange Commission in January 2012, there are no beneficial owners that hold more than 10% of Apple's outstanding common stock. NeXT Software, Inc. is a wholly owned subsidiary of Apple Inc.

4. The names of all law firms and the partners or associates that appeared for party or amicus now represented in trial court or agency or are expected to appear in this court are:

i

#### ORRICK, HERRINGTON SUTCLIFFE LLP:

E. Joshua Rosenkranz Mark S. Davies Rachel M. McKenzie T. Vann Pearce, Jr. Alyssa Caridis Kelly M. Daley Christopher J. Higgins Katherine M. Kopp Daniel Habib Michael Spillner

#### WEIL GOTSHAL & MANGES LLP:

Jonathan Bloom Anne M. Cappella Brian C. Chang Justin L. Constant Mark G. Davis David M. DesRosier Brian E. Ferguson Nathan A. Greenblatt Jacqueline T. Harlow Jill J. Ho Edward S. Jou Kevin S. Kudlac Christopher T. Marando Rodney R. Miller Julian Moore Danielle S. Rosenthal Stephen K. Shahida Rachelle H. Thompson Robert T. Vlasis Robert P. Watkins, III Elizabeth S. Weiswasser

#### COVINGTON & BURLING LLP:

Elena M. DiMuzio Christopher K. Eppich Samuel F. Ernst Robert D. Fram Danielle L. Goldstein Christine Saunders Haskett Robert T. Haslam Matthew J. Hawkinson Richard A. Lopez Anupam Sharma Ranganath Sudarshan Winslow B. Taub

#### TENSEGRITY LAW GROUP LLP:

Steven S. Cherensky Paul T. Ehrlich Monica M. Eno Robert L. Gerrity Azra Hadzimehmedovic Matthew D. Powers Stefani C. Smith

## WILMER CUTLER PICKERING HALE & DORR LLP:

Joseph Mueller

#### GODFREY & KAHN, S.C.:

James D. Peterson Bryan J. Cahill

BOARDMAN, SUHR, CURRY & FIELD LLP: Catherine Cetrangolo BRIDGES & MAVRAKAKIS LLP:

James A. Shimota Lawrence Lien Michael Pieja

SCHIFF HARDIN LLP:

Stacie R. Hartman

Date: April 25, 2013

Respectfully submitted,

ORRICK, HERRINGTON & SUTCLIFFE LLP

By: <u>/S/ E. Joshua Rosenkranz</u> E. Joshua Rosenkranz *Attorney for Plaintiffs-Appellants* 

# TABLE OF CONTENTS

TABLE OF AUTHORITIES viii
STATEMENT OF RELATED CASES ON CROSS-APPEALxiv
TABLE OF ABBREVIATIONS
INTRODUCTION
STATEMENT OF CROSS-APPEAL FACTS
Industry Standards Deliver Substantial Benefits So Long As FRAND Commitments Protect Against Patent Hold-Up2
IEEE And ETSI Develop Standards In Reliance On FRAND Commitments4
Motorola Makes FRAND Commitments With Respect To Each Patent At Issue Here5
Apple Purchases A Module That The Supplier Has Licensed From Motorola7
Motorola Ambushes Apple By Terminating The Supplier's Contract And Demanding A Far Higher Rate
Motorola Sues Apple And The District Court Dismisses The Suit9
Motorola Promises The FTC Not To Seek Injunctive Relief11
SUMMARY OF THE CROSS-APPEAL ARGUMENT
CROSS-APPEAL ARGUMENT
I. THE DISTRICT COURT PROPERLY CONSTRUED THE TERM "TRANSMIT OVERFLOW SEQUENCE NUMBER" IN THE '712 PATENT
A. The Invention Described And Claimed In The '712 Patent Does Not Transmit An Overflow Sequence Number To The Receiver
B. Motorola's Admissions In Prosecuting The '712 Patent's Identical Japanese Counterpart Confirm The Construction

II.		DISTRICT COURT PROPERLY CONSTRUED THE PATENT	18
	А.	The District Court Correctly Held That The Inner And Outer Codes Must Be Formed Before Being Multiplied	20
	В.	The District Court Correctly Construed "A Set of Orthogonal Codewords"	22
III.		DISTRICT COURT CORRECTLY DISMISSED TOROLA'S LEGALLY FLAWED DAMAGES CLAIMS	24
	A.	Motorola Provided No Evidence Of The Value Of Motorola's Invention, Instead Relying On The Value It Acquired Upon Being Incorporated Into The Standard	25
	В.	Motorola Improperly Used The Price Of The Entire Accused Device In Calculating Damages	32
	C.	Motorola Presented No Evidence Linking The Proposed Apportionment Of The Portfolio Value To The Claimed Inventions	37
IV.	THA	DISTRICT COURT CORRECTLY DETERMINED T MOTOROLA'S FRAND COMMITMENT BARS JNCTIVE RELIEF HERE	40
	A.	The District Court Correctly Determined That Motorola Cannot Show Irreparable Injury Or Inadequacy Of Damages	41
	B.	The Balance Of Hardships And Public Interest Factors Favor Apple	48
	C.	The District Court Did Not Adopt A "Categorical" Rule Against Injunctions	50
REP	LY Al	RGUMENT	54
I.	CLA	DISTRICT COURT ERRONEOUSLY LIMITED THE IMS OF THE '949 PATENT BY MISAPPLYING	
	MEA	ANS-PLUS-FUNCTION RULES	54

	A.	The Claims Are Not Means-Plus-Function Claims Because They Neither Recite A "Means" Nor Exhibit Exceptional Characteristics That Override The Drafter's Choice	54
	В.	If The Claims Are Means-Plus-Function Claims, The Specification Includes Sufficient Structure	57
	C.	The Specification Describes A "Next Item Heuristic" That Covers Horizontal Swipes	59
II.		DISTRICT COURT ERRONEOUSLY CONSTRUED TERMS IN THE '647 PATENT	62
	А.	The District Court Erred When Construing "Analyzer Server"	62
	В.	The District Court Erred When Construing "Linking Actions To The Detected Structure"	64
III.	CON	OROLA HAS RAISED AN ERRONEOUS STRUCTION OF THE TERM "REALTIME API" IN '263 PATENT	67
IV.	THA	DISTRICT COURT ERRONEOUSLY CONCLUDED T APPLE COULD NOT ESTABLISH DAMAGES FOR 'OROLA'S INFRINGEMENT	69
V.	THA INJU	DISTRICT COURT ERRONEOUSLY CONCLUDED T APPLE WAS NOT ENTITLED TO A TRIAL ON JNCTIVE RELIEF FOR MOTOROLA'S	
or c -		RINGEMENT	
CON	ICLUS	SION	74

Material has been deleted from pages 1, 2, 5-10, 21, 22, 24-27, 32-36, 42, 44, 52, 55, 62, and 72 of the nonconfidential Response and Reply Brief of Plaintiffs-Appellants Apple Inc. and NeXT Software, Inc. This material is deemed confidential information pursuant to the Protective Orders entered January 28, 2011 and February 1, 2012. The material omitted from these pages contains confidential deposition and hearing testimony, confidential business information, confidential patent application information, and confidential licensing information.

# TABLE OF AUTHORITIES

# Page

# CASES

ActiveVideo Networks v. Verizon Commc'ns, Inc., 694 F.3d 1312 (Fed. Cir. 2012)1, 42,	44, 70
AIA Eng'g Ltd. v. Magotteaux Int'l S/A, 657 F.3d 1264 (Fed. Cir. 2011)	17
Already, LLC v. Nike, Inc., 133 S. Ct. 721 (2013)	41
<i>Altiris, Inc. v. Symantec Corp.,</i> 318 F.3d 1363 (Fed. Cir. 2003)	20
Apple, Inc. v. Motorola Mobility, Inc., No. 11-cv-178-bbc, 2012 WL 5416941 (W.D. Wis. Oct. 29, 2012)	43
Apple, Inc. v. Samsung Elecs. Co., Ltd., 695 F.3d 1370 (Fed. Cir. 2012)	48
Aristocrat Techs. Australia PTY Ltd. v. Int'l Game Tech., 521 F.3d 1328 (Fed. Cir. 2008)	57, 59
Atmel Corp. v. Info. Storage Devices, Inc., 198 F.3d 1374 (Fed. Cir. 1999)	58
Bicon, Inc. v. Straumann Co., 441 F.3d 945 (Fed. Cir. 2006)	16
Biomedino, LLC v. Waters Techs. Corp., 490 F.3d 946 (Fed. Cir. 2007)	58
Broadcom Corp. v. Qualcomm Inc., 501 F.3d 297 (3d Cir. 2007)	.26, 27
CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359 (Fed. Cir. 2002)	61

Dura Automotive Sys. of Indiana, Inc. v. CTS Corp., 285 F.3d 609 (7th Cir. 2002)
<i>eBay, Inc. v. MercExchange, L.L.C.,</i> 547 U.S. 388 (2006)
Edwards Lifesciences AG v. Corevalve, Inc., 699 F.3d 1305 (Fed. Cir. 2012)
Garretson v. Clark, 111 U.S. 120 (1884)
Gillette Co. v. Energizer Holdings, Inc., 405 F.3d 1367 (Fed. Cir. 2005)
<i>Grain Processing Corp. v. Am. Maize-Prods. Co.</i> , 185 F.3d 1341 (Fed. Cir. 1999)27, 28
Hologic, Inc. v. SenoRx, Inc., 639 F.3d 1329 (Fed. Cir. 2011)
Hynix Semiconductor, Inc. v. Rambus Inc., 609 F. Supp. 2d 951 (N.D. Cal. 2009)45
<i>i4i Ltd. P'ship v. Microsoft Corp.</i> , 598 F.3d 831 (Fed. Cir. 2010)70
Innogenetics, N.V. v. Abbott Labs., 512 F.3d 1363 (Fed. Cir. 2008)
Inventio AG v. ThyssenKrupp Elevators Am. Corp., 649 F.3d 1350 (Fed. Cir. 2011)
LaserDynamics, Inc. v. Quanta Computer, Inc., 694 F.3d 51 (Fed. Cir. 2012)
LG Elecs., Inc. v. Bizcom Elecs., Inc., 453 F.3d 1364 (Fed. Cir. 2006)
Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354 (Fed. Cir. 2004)

Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301 (Fed. Cir. 2009)
Mars, Inc. v. Coin Acceptors, Inc., 527 F.3d 1359 (Fed. Cir. 2008)
Med. Instrumentation & Diagnostics Corp. v. Elekta AB, 344 F.3d 1205 (Fed. Cir. 2003)
Micro Chem., Inc. v. Great Plains Chem. Co., Inc., 194 F.3d 1250 (Fed. Cir. 1999)59, 60
Microsoft Corp. v. Motorola, Inc., F. Supp. 2d, 2012 WL 5248439 (W.D. Wash. Oct. 22, 2012)
Microsoft Corp. v. Motorola, Inc., No. C10-1823JLR, 2012 WL 5993202 (W.D. Wash. Nov. 30, 2012)
<i>Microsoft Corp. v. Motorola, Inc.</i> , 696 F.3d 872 (9th Cir. 2012)
Microsoft Corp. v. Multi-Tech Sys., Inc., 357 F.3d 1340 (Fed. Cir. 2004)17
Monsanto Co. v. Geertson Seed Farms, 130 S. Ct. 2743 (2010)
O2 Micro Int'l v. Beyond Innovation Tech. Co., Ltd. 521 F.3d 1351 (Fed. Cir. 2008)61
Phonometrics, Inc. v. Telecom, 133 F.3d 1459 (Fed. Cir. 1998)15
Polymer Techs., Inc. v. Bridwell,         103 F.3d 970 (Fed. Cir. 1996)         42
Praxair, Inc. v. Advanced Tech. Materials, Inc., 543 F.3d 1306 (Fed. Cir. 2008)

Presidio Components, Inc. v. Am. Tech. Ceramics Corp., 702 F.3d 1351 (Fed. Cir. 2012)	72, 73
Rambus Inc. v. FTC, 522 F.3d 456 (D.C. Cir. 2008)	3
Realtek Semiconductor Corp. v. LSI Corp., No. C-12-03451HRMW, 2012 WL 4845628 (N.D. Cal. Oct. 10, 2012)	43
ResQNet.com, Inc. v. Lansa, Inc., 594 F.3d 860 (Fed. Cir. 2010)	. 37, 39, 40
Riles v. Shell Exploration & Prod. Co., 298 F.3d 1302 (Fed. Cir. 2002)	.27, 38, 39
<i>Rite-Hite Corp. v. Kelley Co., Inc.,</i> 56 F.3d 1538 (Fed. Cir. 1995)	31
Robert Bosch LLC v. Pylon Mfg. Corp., 659 F.3d 1142 (Fed. Cir. 2011)	. 47, 48, 53
Sampson v. Murray, 415 U.S. 61 (1974)	46, 47
TALtech Ltd. v. Esquel Apparel, Inc.,279 F. App'x 974 (Fed. Cir. 2008)	20
Uniloc USA, Inc. v. Microsoft Corp., 632 F.3d 1292 (Fed. Cir. 2011)	34, 36, 37
Voda v. Cordis Corp., 536 F.3d 1311 (Fed. Cir. 2008)	53
Welker Bearing Co. v. PHD, Inc., 550 F.3d 1090 (Fed. Cir. 2008)	54, 55
<i>Zygo Corp. v. Wyko Corp.</i> , 79 F.3d 1563 (Fed. Cir. 1996)	28

## FEDERAL STATUTES AND RULES

15 U.S.C. § 45	
35 U.S.C. § 283	43
35 U.S.C. § 284	
35 U.S.C. § 285	46

# ADMINISTRATIVE AGENCY DECISIONS AND MATERIALS

Comment of FTC, Certain Wireless Comme'n Devices, Portable Data Processing Devices, Computers, and Components Thereof, ITC Inv. No. 337-TA-745 (June 6, 2012)
<ul> <li>FTC Analysis of Proposed Consent Order To Aid Public Comment, In re Motorola Mobility LLC &amp; Google Inc., FTC File No. 1210120 (Jan. 3, 2013)</li></ul>
Complaint, In re Motorola Mobility LLC & Google Inc., FTC File No. 1210120 (Jan. 3, 2013)11, 49, 52
Decision and Order, <i>In re Motorola Mobility LLC &amp; Google Inc.</i> , FTC File No. 1210120 (Jan. 3, 2013)11, 40
Statement, <i>In re Motorola Mobility LLC &amp; Google Inc.</i> , FTC File No. 1210120 (Jan. 3, 2013)11

# LEGISLATIVE MATERIALS

Oversight of the Impact on Competition of Exclusion Orders T	<i>'o</i>
Enforce Standard-Essential Patents: Hearing Before the S.	
Comm. on the Judiciary, 112th Cong. (2012) (testimony of	
Edith Ramirez, Comm'r, Fed. Trade Comm'n)	49

# MISCELLANEOUS

ETSI, Annual Report 2011 (April 2012), available at	
http://bit.ly/11at87X	1

Joseph Farrell et al., <i>Standard Setting</i> , <i>Patents</i> , <i>and Hold-Up</i> , 74 Antitrust L.J. 603 (2007)
FTC, The Evolving IP Marketplace: Aligning Patent Notice and Remedies With Competition (March 2011), available at http://1.usa.gov/Zp050A
Mark A. Lemley, Software Patents and the Return of Functional Claiming (July 25, 2012), Stanford Public Law Working Paper No. 2117302, available at http://bit.ly/174iOAR57
Mark A. Lemley, Intellectual Property Rights and Standard- Setting Organizations, 90 Cal. L. Rev. 1889 (2002)

#### STATEMENT OF RELATED CASES ON CROSS-APPEAL

No appeal from this proceeding was previously before the Court or any other appellate court.

In October 2010, Motorola filed a complaint before the International Trade Commission alleging infringement of various Motorola patents. In re Certain Wireless Commc'n Devices, Portable Music and Data Processing Devices, Computers and Components Thereof, Inv. No. 337-TA-745 (U.S.I.T.C. filed October 6, 2010). Apple filed counterclaims alleging various antitrust and breach of contract claims arising out of Motorola's FRAND obligations related to, as relevant to this cross-appeal, U.S. Patent Nos. 5,319,712 ("712 patent"), 6,175,559 ("559 patent"), and 6,359,898 ("898 patent"). Pursuant to 19 U.S.C. § 1337(c) and 19 C.F.R. § 210.14(e), the counterclaims in that action were removed to the Western District of Wisconsin. Apple, Inc. v. Motorola Mobility, Inc., No. 11-cv-178-bbc (filed Mar. 11, 2011). This Court is currently considering the parties' cross-appeals of the district court's determination in that case. Apple Inc. v. Motorola Mobility, Inc., Fed. Cir. Nos. 13-1150, -1152.

Motorola has also asserted the '712 patent against Microsoft Corporation in two separate proceedings, one in the Western District of Washington and one in the ITC. The district court case is ongoing. *Microsoft Corp. v. Motorola, Inc., et al.*, No. 2-10-cv-01823-jlr (W.D. Wash. filed Nov. 9, 2010). Motorola withdrew its allegations regarding the '712 patent in November 2012, thereby terminating the ITC's investigation. *In the Matter of Certain Gaming and Entertainment Consoles, Related Software, and Components Thereof*, Inv. No. 337-TA-752 (U.S.I.T.C. filed Dec. 23, 2010).

# TABLE OF ABBREVIATIONS

AB	Apple Opening Brief		
API	Application programming interface		
Apple	Apple Inc. and NeXT Software, Inc.		
Br.	Brief of Amicus Curiae [Lead Amicus Name or Abbreviation]		
FTC Analysis	FTC Analysis of Proposed Consent Order To Aid Public Comment, <i>In re Motorola Mobility LLC &amp;</i> <i>Google Inc.</i> , FTC File No. 1210120 (Jan. 3, 2013)		
FTC Complaint	Complaint, <i>In re Motorola Mobility LLC &amp; Google Inc.</i> , FTC File No. 1210120 (Jan. 3, 2013)		
FTC Decision	Decision and Order, <i>In re Motorola Mobility LLC</i> & <i>Google Inc.</i> , FTC File No. 1210120 (Jan. 3, 2013)		
FTC Statement	Statement, <i>In re Motorola Mobility LLC &amp; Google Inc.</i> , FTC File No. 1210120 (Jan. 3, 2013)		
MB	Motorola Opening Brief		
Motorola	Motorola Mobility, Inc.		

Case: 12-1548 Document: 176 Page: 18 Filed: 04/25/2013

# **INTRODUCTION**

Motorola has repeatedly undertaken binding commitments to license any patent that it claims to be a "standard-essential" patent ("SEP") "on fair, reasonable, and non-discriminatory terms," aka "FRAND" terms. As the district court properly concluded, these FRAND promises block Motorola from obtaining an injunction on an SEP. Where a patentee "sought to broadly and extensively license [its] technology ... no fact finder could reasonably conclude that [the patentee] would be irreparably harmed by the payment of a royalty (a licensing fee)." *ActiveVideo Networks v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1339 (Fed. Cir. 2012).

The three Motorola patents at issue here describe trivial inventions. Properly construed (as the district court did), the '712 and '559 patents do not read on any industry standard. And the courtappointed neutral expert disparaged the '898 patent, stating

But regardless, the district court rightly rejected Motorola's demand that Apple pay it for every iPhone and iPad, for an eye-popping \$347 million to

# Confidential Material Omitted

date. Motorola's own expert conceded that a FRAND royalty should not include any hold-up value conferred by standardization.

The Court should affirm the dismissal of Motorola's patent claims.

# STATEMENT OF CROSS-APPEAL FACTS

# Industry Standards Deliver Substantial Benefits So Long As FRAND Commitments Protect Against Patent Hold-Up

"Interoperability standards can create enormous value for consumers by increasing competition, innovation, product quality and choice." FTC Br. 4. "Telephones talk to each other, the Internet works, and hairdryers plug into electrical sockets" because of those standards. Mark A. Lemley, *Intellectual Property Rights and Standard-Setting Organizations*, 90 Cal. L. Rev. 1889, 1893 (2002).

Industry participants often adopt standards under the auspices of private voluntary associations known as standard-setting organizations ("SSOs"). SSOs choose the technology to incorporate in standards through member consensus. Those choices often reflect

A110,683. An SSO

may adopt technology

*id.*, or even because of



Once an SSO adopts a standard, businesses make substantial standard-specific investments. *See, e.g.*, Joseph Farrell et al., *Standard Setting, Patents, and Hold-Up*, 74 Antitrust L.J. 603, 612-15 (2007). The costs of switching mount, "the standardized features start to dominate," *Rambus Inc. v. FTC*, 522 F.3d 456, 459 (D.C. Cir. 2008), and an entire industry often becomes locked in to practicing the patented technology.

This phenomenon can lead to one downside of SEPs: "patent holdup." *Microsoft Corp. v. Motorola, Inc.*, 696 F.3d 872, 876 (9th Cir. 2012). "[O]nce a standard has gained such widespread acceptance that compliance is essentially required to compete in a particular market, anyone holding a standard-essential patent could extract unreasonably high royalties from suppliers of standard-compliant products and services." *Id.*; *see Microsoft Corp. v. Motorola, Inc.*, \_\_ F. Supp. 2d \_\_, 2012 WL 5248439, at \*11 (W.D. Wash. Oct. 22, 2012); FTC Br. 4-7. Hold-up is exacerbated where, as here, dozens of companies declare thousands of patents essential to a single standard. *See* FTC Br. 13 nn.11-12; Law Professors Br. 11 (describing this "patent thicket"). The typical SSO's solution is to extract a price of admission from every member: a binding commitment to license their SEPs to all comers on FRAND terms. It is a fine balance: Implementers know they will not be blocked from the market and patentees enjoy royalties commensurate with the inventive value of their IP, not the value attributable to standardization. AAI Br. 5-6.

### IEEE And ETSI Develop Standards In Reliance On FRAND Commitments

The Institute of Electrical and Electronics Engineers ("IEEE") develops standards "in the fields of electrical, electronics,

communications and computer engineering." IEEE Br. 2. IEEE "asks every participant in a standards-development project" "to identify any holders of potential essential patent claims of which the participant is personally aware," and then "asks any person or entity so identified to state its licensing intentions through completion and submission of the IEEE Letter of Assurance (LOA) form." *Id.* at 12-14.

The European Telecommunications Standards Institute ("ETSI") adopts globally applicable standards for information and communications technologies, including mobile technologies. ETSI, Annual Report 2011, at 2 (April 2012), *available at* http://bit.ly/11at87X.

4

Like IEEE, ETSI has an Intellectual Property Rights ("IPR") policy which provides:



A18,757.

Both organizations will steer their standards away from any technology that is not subject to such a commitment. IEEE Br. 14;

A18,757-58.

# Motorola Makes FRAND Commitments With Respect To Each Patent At Issue Here

'712 patent. In 1993, Motorola filed the patent application that

led to the '712 patent, entitled "Method and Apparatus For Providing

Cryptographic Protection of a Data Stream In A Communication

System." A100,181. Motorola then submitted a Letter of Assurance to

the IEEE stating that if

Motorola patents,

A118,094.

Case: 12-1548 Document: 176 Page: 23 Filed: 04/25/2013 Confidential Material Omitted

In 2004, the IEEE adopted an extension to the 802.11 standard regarding encryption. A20,714, 100,893. Motorola claims, in this litigation, that the revised 802.11 standard requires practicing the '712 patent. A40.

'559 patent. In 1998, Motorola submitted to ETSI a declaration that it would A118,860. Motorola later submitted two other notifications to ETSI declaring

A118,862, 136,792.

The '559 patent is entitled "Method for Generating Preamble Sequences in a Code Division Multiple Access System." A100,213, col. 1:10-24. Motorola claims ETSI's Third Generation ("3G") Universal Mobile Telecommunications System ("UMTS") standard includes the technology claimed in the '559 patent. A137, 3684, 118,862-79. '898 patent. The '898 patent is entitled "Method for Performing a Countdown Function During a Mobile-Originated Transfer for a Packet Radio System." A100,216. ETSI's Global Packet Radio Service ("GPRS") standard uses wireless cellular communications to send data between mobile stations and a network base station. A6148. When ETSI adopted GPRS, multiple technologies vying for inclusion in the standard could deliver the same functionality that Motorola was offering. A139,880-82, 140,312, 140,347, 140,356, 140,364. Unlike Motorola's proposal, at least two of these alternatives were unpatented. A19,495-97.

In 2003, Motorola declared the '898 patent essential to GPRS. A136,790-95. Motorola promised that it would license the '898 patent on FRAND terms. A136,792.

## Apple Purchases A Module That The Supplier Has Licensed From Motorola

In June 2007, Apple introduced the first iPhone. A17,418-21. The iPhone incorporated technology supplied by Chi Mei Communication Systems, Inc., a Chinese provider of

A19,075.

Case: 12-1548 Documer	nt: 176	Page: 25	Filed: 04/25/2013 Confidential Material Omitted		
		A111,582,	111,584, 139,256-58.		
			A139,306-73, and		
			A139,260-304.		
A111,582, 111,584.					
Motorola Ambushes Apple By Terminating The Supplier's Contract And Demanding A Far Higher Rate					
A139,375-76. Two days later, N	/lotorol	a wrote to	Apple that		
A13	39,378-	94. Motor	rola then informed		
Apple that it had a portfolio of patents that it					
		and tha	t		
			A104,548.		
Apple protested that it wa	as		at the demand,		
A104,548, which amounted to					
A20,367—i.e.,	,				

Ca	se: 12-1548	Document: 176	Page: 26	Filed: 04/25/2013
			0	Confidential
				Material Omitted
				material Onlitted
				A111,582,
111,584. A	pple			
		A	104,548.	
			,	
Apple	e proposed a		A104.856	6. Given that
11	1 1		,	
	and			
h	etween ther	n, Apple told M	lotorola t	hat it
			A104	,548. Alternatively,
			11101	,010. 11100111401/019,
Apple was	willing to co	ntinue discussi	ng	
iippie was	winning to co			
	L	d.		
		λ.		
A104,571, 1	118 885			
A104,071, .	110,005.			
	104 665 130	253.54 Thom	ortiog no	ver reached an
A	104,005, 159	,200-04. The p	arties ne	ver reached an
agroomant				
agreement.				
Motorola	Sues Apple	And The Dis	trict Co	urt Dismisses The Suit

In 2010, Motorola sued Apple for infringement of the '712, '559, and '898 patents. A1104.

In a series of pretrial orders, the district court granted Apple summary judgment on the '712 patent, A40, and on the '559 patent, A100,146-48, which meant they were not SEPs, as Motorola had insisted. With only the '898 patent left, the district court granted summary judgment on Motorola's claim for both damages and injunctive relief. A140-43.

On damages, Motorola proffered the testimony of economist Carla Mulhern. Her estimate was based on general testimony that a single declared SEP

A20,338 (emphasis

added). Ms. Mulhern concluded that Motorola was entitled to

A20,126. (Ms. Mulhern's

"lost profits estimate," A121, 20,049, is no longer relevant on appeal. MB 56-63 (addressing only "reasonable royalty damages").) The district court excluded Ms. Mulhern's damages estimate as "unreliable," A121, and subsequently granted Apple summary judgment on that patent for the absence of any reliable evidence of damages, A140. Notwithstanding its FRAND commitments, Motorola sought an injunction. A1113-14. The district court held that damages, if properly supported, could have adequately compensated Motorola for any harm incurred by the alleged infringement and denied Motorola's request for an injunction. A140-43.

#### Motorola Promises The FTC Not To Seek Injunctive Relief

Meanwhile, the FTC filed a complaint against Motorola's practice of seeking injunctions on FRAND-committed SEPs in this and other cases. *See* FTC Complaint ¶ 1; FTC Decision at 1-2. The FTC insisted that the practice was an unfair method of competition, in violation of § 5 of the FTC Act (15 U.S.C. § 45). FTC Complaint ¶¶ 1, 31. Motorola (now owned by Google, Inc.) entered into a consent decree to settle the complaint. The consent decree "requires Google to withdraw its claims for injunctive relief on FRAND-encumbered SEPs around the world, and to offer a FRAND license to any company that wants to license Google's SEPs in the future." FTC Statement at 1.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Apple is not seeking to enforce the consent decree here; it will seek relief under the decree as necessary in the appropriate forum.

Given this promise, delivered to a government agency just months ago, it is remarkable that a central premise of Motorola's appeal here is that it is entitled to seek injunctive relief. MB 63-74.

#### SUMMARY OF THE CROSS-APPEAL ARGUMENT

The district court properly construed the '712 patent claim term "transmit overflow sequence number" to exclude a number that was communicated from transmitter to receiver. And the district court properly construed the '559 patent's claims to, among other things, require that a "set of orthogonal codewords" include at least two such codewords. As to damages, Motorola's theory rests on the fact that it has declared its patents standard-essential. That is Motorola's justification for failing to discount any hold-up value from its estimate, improperly considering the price of the *entire* iPhone in calculating its proposed royalty award (even though the claims here are to trivial features), and erroneously seeking 40% to 50% of the value of its entire standard-essential patent portfolio.

As to injunctive relief, Motorola has acknowledged that money is a satisfactory remedy for use of its patents by promising to license these

12

patents on FRAND terms. This acknowledgement alone disentitles Motorola to injunctive relief.

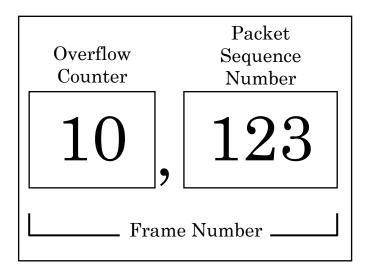
### **CROSS-APPEAL ARGUMENT**

### I. THE DISTRICT COURT PROPERLY CONSTRUED THE TERM "TRANSMIT OVERFLOW SEQUENCE NUMBER" IN THE '712 PATENT

## A. The Invention Described And Claimed In The '712 Patent Does Not Transmit An Overflow Sequence Number To The Receiver

Motorola claims that Apple devices capable of Wi-Fi Protected Access ("WPA") encryption infringe claim 17 of the '712 patent. Motorola's infringement claim fails unless the claim term "transmit overflow sequence number" ("TOSN") refers to a number that can be communicated from a transmitter to a receiver. A40; A140,640. Both judges below concluded that the TOSN was *not* communicated from transmitter to receiver. A41-42, 3340-41.

"TOSN" does not have a known meaning in the art; it was created by the patentees to describe a specific aspect of their invention. The disclosed invention involves encrypting data packets and then transmitting them in a wireless communication system. The transmitter divides data streams into packets. A100,185, col. 5:13-15. The transmitter assigns each packet a "frame number," which is necessary to decrypt the packet. The frame number consists of two segments: a packet sequence number ("SN") and an overflow sequence number ("overflow counter"), as in the illustration below. A100,184, col. 3:34-37, 44-52.



The sequence number ("123," above) counts to 128 repeatedly and the overflow counter ("10," above) keeps tally of how many times the count starts again, sort of like how a digital clock beginning at 00:01 keeps track of how many times the device has counted to 60.

After the packet is encrypted, the packet goes to the receiver with the sequence number, but *without* the overflow sequence number. A100,181, Abstract; A100,183, col. 2:30-35; A100,185, col. 5:23-32. Hence, an eavesdropper has only part of the frame number and, therefore, cannot decrypt the package. A100,181, Abstract; A100,183,

14

col. 2:37-39; A100,184, col. 4:17-27; A100,185, col. 5:46-54; A100,869.
The receiver receives the packet and SN and then *independently*reconstructs the overflow sequence number. A100,181, Abstract;
A100,182, Fig. 1 at 172, 174; A100,183, col. 2:35-39; A100,184, col. 4:1427; A100,185, col. 5:41-43.

Transmitting of the overflow sequence number would make no sense. If that were possible, then the snoop who intercepts the package would have the entire frame number. There would be no reason for a separate overflow sequence number to exist. The construction of "TOSN" must take this into account. *See Phonometrics, Inc. v. Telecom Inc.*, 133 F.3d 1459, 1466 (Fed. Cir. 1998).

Moreover, claim 17 uses "*transmit* overflow sequence number" and not just "overflow sequence number." The patent only uses "TOSN" to describe the overflow sequence number at the transmitter, while using "receive overflow sequence number" at the receiver. A100,181, Abstract; A100,183, col. 2:27-39 ("Summary of the Invention"); A100,185, col. 5:17-28, 41-52; A100,186-87 (*compare* claims 6 and 17 *with* claims 11 and 18). Claim 17 underscores the point when it refers to "communicating *the packet and packet sequence number*" from transmitter to receiver. A100,187, col. 9:6-11 (emphasis added). By negative implication, that must mean that the TOSN is not communicated with the sequence number. Construing the claim to cover TOSNs that *are* transmitted would make the "communicating" clause pointless. *See Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006).

#### B. Motorola's Admissions In Prosecuting The '712 Patent's Identical Japanese Counterpart Confirm The Construction

Motorola confirmed this construction when it successfully persuaded the Japanese patent office to allow an *identical claim* over prior art. A100,862-64, 103,000-09. Motorola successfully argued that unlike the prior art, in its claim, "the overflow sequence number is never transmitted .... [T]here is no chance to intercept the overflow sequence number; thus, it provides a higher level of security." A100,867-69. Motorola emphasized these points throughout prosecution. A100,886-87, 100,875-76. Further, Motorola highlighted the difference between extracting an overflow sequence number from transmitted data, as in the prior art, and "independently determin[ing]" this number at the receiver, as in Motorola's claimed invention. A100,885-86. Both Judge Crabb and Judge Posner found that these "precise and unequivocal" statements "confirm that the overflow sequence number is not transmitted." A41-42, 3340-41.

On appeal, Motorola suggests that the district court used extrinsic evidence to "overrule" the intrinsic record. MB 54-55. But Motorola's representations in Japan confirm what the term meant all along. And unlike the "at best, equivocal" statements in *AIA Eng'g Ltd. v. Magotteaux Int'l S/A*, 657 F.3d 1264, 1279 (Fed. Cir. 2011) (cited at MB 54-55), Motorola's representations were unequivocal.

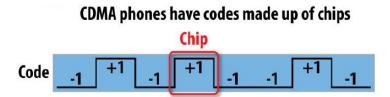
Contrary to Motorola's assertion (at 55), accounting for Motorola's post-issuance statements will not undermine the public notice function of patents. When a patentee "characteriz[es] the scope of its invention" in "an official proceeding in which the patentee had every incentive to exercise care," this Court "will not construe the scope of the ... claims more broadly than the patentee itself clearly envisioned" even when the patentee's statements come after the patent issues. *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004). This rule applies even when the limiting statements are made in a foreign

17

agency. Accord Gillette Co. v. Energizer Holdings, Inc., 405 F.3d 1367, 1374 (Fed. Cir. 2005) (European prosecution).

#### II. THE DISTRICT COURT PROPERLY CONSTRUED THE '559 PATENT

The '559 patent describes a method by which mobile devices such as cell phones identify themselves to a base station, such as a cell tower, by transmitting a "preamble sequence." A100,213, col. 1:4-24. The basic unit of transmitted information is a "chip." A102,279. Chips are binary, having a value of either +1 or -1. *Id*. Data is transmitted using sequences of chips, called "codes":



*Id.*; *see* A100,632. The preamble sequence is a code created by multiplying two strings of chips: the "inner code" that is unique to the mobile device, and the "outer code" that is specific to the base station. *See* A100,213, col. 2:52-55; A100,214, col. 3:45-55.

The '559 patent describes a type of multiplication called "point-bypoint," in which the first chip of the first code is multiplied by the first chip of the second code, the second chip of the first code is multiplied by the second chip of the second code, and so on. For example, if Code 1 consists of {1, -1, 1, -1} and Code 2 consists of {1, 1, 1, 1}, the code that would result from multiplying them would be {(1x1), (-1x1), (1x1), (-1x1)}, or {1, -1, 1, -1}. *See* A100,214, col 3:3-37; A100,210, Fig. 3; A102,279-80.

The inner code is itself made up of smaller individual sequences of digits called "codewords." A100,214, col. 3:46-55. Mathematically speaking, codewords are said to be "orthogonal" if, when compared chip by chip, the number of matching chips (which will always multiply to 1) equals the number of non-matching chips (which will always multiply to -1). If you do point-by-point multiplication and add the results, the codewords are orthogonal if the sum is zero. A102,280. (*E.g.*, Codes 1 and 2 are orthogonal because (1x1) + (-1x1) + (1x1) + (-1x1) = 0.) A codeword is not orthogonal to itself because all its chips match; the product of multiplying each chip will be 1, and they will, therefore, not add up to zero. *Id*.

Motorola challenges two aspects of the district court's construction of claim 5 in the '559 patent. Both are meritless.

#### A. The District Court Correctly Held That The Inner And Outer Codes Must Be Formed Before Being Multiplied

Motorola first challenges the district court's ruling that the outer and inner codes must first be fully formed before the multiplication step takes place. A140,429. It does not dispute that there are times when a claim or specification implicitly requires that the steps be performed in the order written. *TALtech Ltd. v. Esquel Apparel, Inc.*, 279 F. App'x 974, 978 (Fed. Cir. 2008) (citing *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369-70 (Fed. Cir. 2003)). That is the case here. *See* A132,340-53.

As the court observed, the specification carefully distinguishes between embodiments and the invention as a whole, and describes "the present invention" as first forming the outer and inner codes, and "then multipl[ying]" them together to generate a preamble sequence. A100,213, col. 2:52-57 (emphasis added); see A140,428-29. The word "then" makes clear that the multiplication takes place "only after the formation steps are complete." A140,429 (emphasis added); see A100,210, Fig. 4 (showing process that forms the outer and inner codes, performs multiplication, and then ends without repeating any steps); A100,214, col. 4:25-30 (same). By contrast, the specification does not refer to any type of iterative process in which individual chips are formed and immediately multiplied before the rest of the codes' chips are formed and multiplied, as Motorola advocates. Motorola argues (at 50) that the reference to custom hardware means the steps should not proceed sequentially. But this passage has nothing to do with the order of the steps. And the patent's discussion of chip-by-chip multiplication likewise sheds no light on whether the codes must be fully formed before the multiplication occurs. A100,210, Fig. 3; A100,214, col. 3:37.

Claim 5 also supports the district court's construction. First, the multiplication step refers to "*the*" inner code and "*the*" outer code being multiplied together, which implies the entire codes. The claim does not refer to multiplying "outer code" by "inner code," "portions" of the inner and outer codes, or "chips" of the inner and outer codes. Second, the multiplication step refers to the product of the multiplication as "a preamble sequence." The court-appointed neutral technical expert testified that

Case: 12-1548 Document: 176 Page: 39

Filed: 04/25/2013 Confidential Material Omitted

A128,708. To generate the "preamble sequence,"

you need to multiply the entire inner code by the entire outer code.

# B. The District Court Correctly Construed "A Set of Orthogonal Codewords"

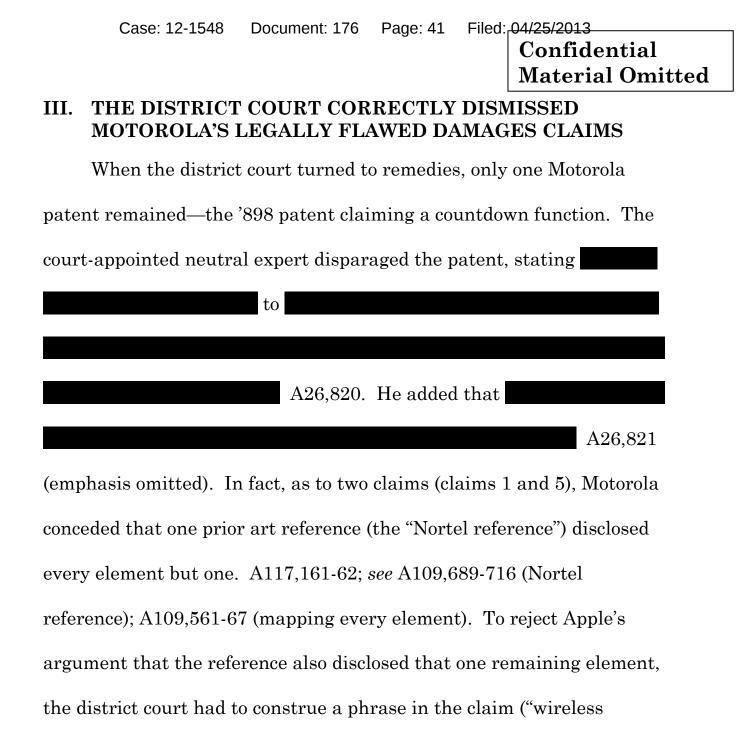
Motorola also challenges the district court's holding that the "set of orthogonal codewords" must include at least two orthogonal codewords. A86. Motorola argues that the claim requires only that the inner code be "taken from" a set of orthogonal codewords, such that the inner code can consist of a single codeword, repeated over and over. Motorola is wrong. The district court's construction is consistent with both claim 5 and the specification.

Claim 5 states that the codewords s<sub>j</sub> "*are*" a set of orthogonal codewords, and are not simply "taken from" a set of orthogonal codewords as Motorola advocates. A100,215, col. 5:20-35 (emphasis added). The specification likewise says the inner code "*comprises*" a series of orthogonal codewords and "*is*" a set of orthogonal codewords again indicating that it *contains* orthogonal codewords. A100,214, col. 3:46-59; A84.

Motorola focuses on the portion of the specification that says the codewords in this set can be "taken from" other sets. *See* A100,214, col.

3:66-4:7. But that is consistent with the district court's construction; codewords can be both *taken from* a set of orthogonal codewords and can, themselves, *comprise* a set of orthogonal codewords. (Just as one might have a table setting comprised of a set of forks and knives, taken from a set of forks and knives in a silverware drawer.)

Motorola's argument (at 51-53) that the district court excluded a preferred embodiment reads too much into a single sentence from the specification: "It is not required that the orthogonal codewords are unique." A100,214, col. 3:57. As the district court explained, all this means is that "there *can be* repeats" among the inner code's codewords. A86 (emphasis added). If there are a limited number of codewords to choose from, there are bound to be some repetitions in a 4,000+ chip inner code. So long as the selected codewords include codewords that are orthogonal to each other, the element is met even if there are repeats. Figure 6, which illustrates the supposedly excluded preferred embodiment, further supports this conclusion. Figure 6 does not have an inner code consisting entirely of a single repeated codeword, as Motorola asserts. MB 51-52. Its inner code has some repeats of codewords, but every non-repeated codeword is orthogonal to the other.



communication system") to mean something different than the same words used in the preamble, and had to acknowledge that its

construction was inconsistent with how the words were used in the specification. A53. The neutral expert also disparaged the remaining asserted claim (claim 2) as

A26,822.<sup>2</sup>

Despite these significant defects, Motorola maintains that it nevertheless was entitled to hundreds of millions of dollars and an injunction against every iPad and iPhone. Motorola is wrong. We address damages in this section and the injunction in the next.

# A. Motorola Provided No Evidence Of The Value Of Motorola's Invention, Instead Relying On The Value It Acquired Upon Being Incorporated Into The Standard<sup>3</sup>

The district court held that "the purpose of the FRAND

requirements ... is to confine the patentee's royalty demand to the value conferred by the patent itself." A140. The value of the "patent qua patent," it continued, is "distinct from the additional value—the hold-up value—conferred by the patent's being designated as standardessential." *Id.* Motorola does not dispute this point; indeed, its own

<sup>&</sup>lt;sup>2</sup> In the interest of judicial economy, Apple has declined to raise the denial of summary judgment of invalidity as an alternative ground for affirmance, but reserves the right to continue contesting the validity of the '898 patent in subsequent proceedings.

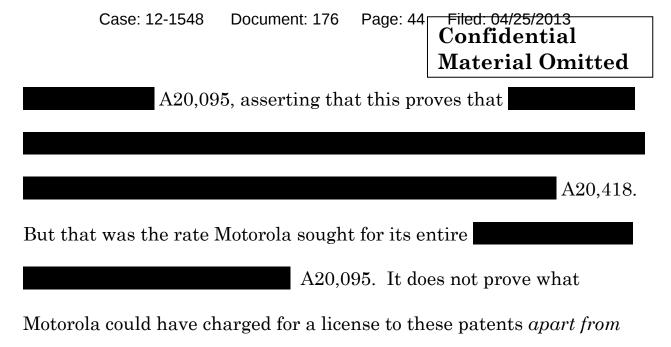
<sup>&</sup>lt;sup>3</sup> Motorola's flawed damages theory covered both the '559 patent and the '898 patent. Thus, the '559 patent should be dismissed on this alternative ground, even if this Court accepts Motorola's claim construction.

#### Filed: 04/25/2013 Confidential Material Omitted

expert agreed. A20,399. It is a conclusion that flows not only from the FRAND obligation but from the fundamental purpose of the patent system. As the district court observed, "the monopoly power [is] designed to reward the patentee for inventing something," not for "the value ... conferred by making it a standard." A90,541.

Motorola contends that there is no hold-up value here because the inclusion of a patent in a standard is necessarily a testament to its superiority. MB 3, 60. But the decision to include a technology in a standard is based on multiple factors, many having nothing to do with superiority. *See supra* at 2; Microsoft Br. 9-13.

Regardless, even if Motorola's patents *did* represent the best technology available when the standards were adopted—a point that Apple disputes, A139,880-82, 139,884-85—at least some portion of their value post-standardization, likely most of it, is due not to their technical superiority, but to high switching costs. *See Broadcom Corp. v. Qualcomm Inc.*, 501 F.3d 297, 310, 314 (3d Cir. 2007). Motorola's experts emphasized that



any hold-up.

The question, then, is how to assess whether the Motorola patents are worth anything apart from their incorporation into a standard. The district court was correct that the answer has to start with "what the cost to the licensee would have been of obtaining, just before the patented invention was declared essential to compliance with the industry standard, a license for the function performed by the patent." A140; *see Broadcom*, 501 F.3d at 314 (a patent's "value is limited when alternative technologies exist," but "[a] standard, by definition, eliminates alternative technologies"); *Riles v. Shell Exploration & Prod. Co.*, 298 F.3d 1302, 1312 (Fed. Cir. 2002) ("the market could not award [a patentee] a royalty for his method divorced of all relation to a potential non-infringing alternative method"); *Grain Processing Corp. v.* 

Am. Maize-Prods. Co., 185 F.3d 1341, 1347, 1353 n.5 (Fed. Cir. 1999) (the cost difference between infringing and non-infringing alternatives "effectively cap[s] the reasonable royalty award"); Zygo Corp. v. Wyko Corp., 79 F.3d 1563, 1571-72 (Fed. Cir. 1996) (alleged infringer could "negotiate for a lower royalty rate knowing it had a competitive noninfringing device 'in the wings"). Motorola's expert again agreed. A20,399. The FTC agrees too. See FTC, The Evolving IP Marketplace: Aligning Patent Notice and Remedies With Competition 23, 191-94 (March 2011), available at http://1.usa.gov/Zp050A ("FTC Report").

Motorola concedes only that "[t]he *ex ante* analysis required by the district court may be a relevant data point." MB 59-60. It protests that relying exclusively on that analysis "would set the value before the technology had been tested in the marketplace," and thus discount more than just the value conferred by standardization. *Id.* That concern does not entitle patentees to propound inflated damages numbers without even trying to discount any hold-up value. Instead, a proper solution would be to also examine the incremental value of the claimed features over alternatives available when the alleged infringer makes

its design decision. *See* FTC Report at 190; Verizon Br. 26-27; Altera Br. 10-11.

For example, at least two unpatented alternatives to the countdown function claimed by the '898 patent were available when that function was incorporated into the GSM standard. A139,880-82. If, in 2007, it still would have been possible to revise the standard and replace the function claimed by the '898 patent with one of those alternatives (or any other alternative developed in the interim), then the incremental value (if any) of the function claimed by the '898 patent over those alternatives would be the correct measure of damages.

This answers Motorola's (and its amicus's) argument that requiring ex ante valuation conflicts with this Court's caselaw permitting consideration of a hypothetical licensing negotiation "as of the date infringement began." MB 59; *see* Qualcomm Br. 29 n.7. The reason for that timing is "to recreate the *ex ante* licensing negotiation scenario" that could have taken place "if infringement had not occurred." *Lucent Techs., Inc. v. Gateway, Inc.,* 580 F.3d 1301, 1325 (Fed. Cir. 2009). As amici Verizon et al. explain, "[i]f the relevant ex ante negotiation takes place just before the defendant's design decision

is made, then the patentee will be able to bargain for a fee that reflects the value of the patented technology over alternatives." Verizon Br. 26-27. Thus, "the time 'just before infringement began' must mean 'just before the activity eventually deemed infringing began, or the time the design decision was made" that ended up binding the defendant. *Id.* at 27 (quoting FTC Report at 190). Otherwise "the reasonable royalty awarded 'improperly reflects the economic value of investments made by the' defendant rather than 'the economic value of the invention." *Id.* (quoting FTC Report at 190).

But, "going for broke," A139, Motorola did not even attempt to discount hold-up value in proposing a royalty award. Motorola does not dispute that it failed to quantify any incremental value of the '559 and '898 patents over alternatives, either at the time of standardization or at the time Apple decided it would launch the iPhone on the AT&T network (the only network on which Motorola's cellular patents are relevant, A119). MB 59-60; *see* A140. Motorola chose instead to rely exclusively on the licensing history for standard-essential portfolios—its own, and generally. MB 56, 62-63. Those past licensing practices do not reflect the value of any particular SEP disaggregated from the holdup value, and thus are not an appropriate measure of damages. "Reliance on past licenses for standard-essential patents would only translate improper leverage exerted in the past to the present." Microsoft Br. 21-22.

Motorola suggests that it is *Apple's* burden to establish the availability of non-infringing alternatives and what effect those alternatives should have on the royalty amount. MB 60-61. That is incorrect. "The patentee bears the burden of proving damages." Uniloc USA, Inc. v. Microsoft Corp., 632 F.3d 1292, 1315 (Fed. Cir. 2011). Even in the lost profits context on which Motorola relies (at 61), the patentee must establish a reasonable probability of the "absence of acceptable non-infringing substitutes." Rite-Hite Corp. v. Kelley Co., Inc., 56 F.3d 1538, 1545 (Fed. Cir. 1995) (en banc). Moreover, the question here is not whether non-infringing alternatives are "substitutes," such that infringement did not cause any lost profits. As discussed above, the proper measure of a reasonable royalty is the difference in value, if any, between the patentee's invention and the next best non-infringing alternative. It is the patentee's burden to quantify that difference. Motorola did not even try.

Amicus Qualcomm argues (at 28-29) that this Court has held it is "wrong as a matter of law to claim that reasonable royalty damages are capped at the cost of implementing the cheapest available, acceptable, noninfringing alternative." *Mars, Inc. v. Coin Acceptors, Inc.*, 527 F.3d 1359, 1373 (Fed. Cir. 2008). But that statement is dicta; there were no "available, acceptable, noninfringing alternatives" in that case. *Id.* at 1372. In any event, it conflicts with the prior authority cited above (at 27-28). *See* Verizon Br. 20 n.5.

# B. Motorola Improperly Used The Price Of The Entire Accused Device In Calculating Damages

Motorola's damages claim is also legally flawed because it is based on the market value of the entire iPhone, yielding an astronomical royalty figure for trivial features. For its portfolio, Motorola asserts an "entitlement to 2.25 percent of all [accused device] sales." A139. For the '559 and '898 patents, or even just for the '898, "Motorola claims to be entitled to damages" of "40 to 50 percent of 2.25 percent, which would be 0.9 to 1.125 percent of sales of Apple devices that infringe."

#### A20,092-93.

The "entire market value rule" is not a rule, but a "narrow exception" to the "general rule" that "royalties be based not on the entire product, but instead on the 'smallest salable patent-practicing unit," *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67 (Fed. Cir. 2012), here, the module Apple purchased from Chi Mei, A20,494. Where, as here, "small elements of multi-component products are accused of infringement, calculating a royalty on the entire product carries a considerable risk that the patentee will be improperly compensated for non-infringing components of that product." *LaserDynamics*, 694 F.3d at 67.

Contrary to Motorola's suggestion, the exception does not apply simply because Motorola can demonstrate that it has, in the past, managed to extract royalties "applied to the selling price of the device itself." MB 56. Motorola's past licensing practices are not conclusive because they likely reflect improper hold-up. *See supra* at 26-27, 30-31. In any event, "a patentee may be awarded damages as a percentage of revenues or profits attributable to the entire product" only where "it can

Material Omitted

be shown that the patented feature drives the demand for [the] entire multi-component product." *LaserDynamics*, 694 F.3d at 67; *see Garretson v. Clark*, 111 U.S. 120, 121 (1884); *Lucent*, 580 F.3d at 1336; *Uniloc*, 632 F.3d at 1318.

Under the general rule, an SEP owner would still recover ample rewards for its innovation. If its patent is, in fact, valid, essential, and enforceable, then every business that implements the standard must pay the SEP owner. Here—without ever proving validity, infringement, and enforceability—Motorola was effectively collecting from Apple

for every device. A111,582, 111,584.

Motorola is incorrect in asserting that it is entitled to the entire market value exception because the asserted patents (among the thousands of SEPs) are responsible for enabling the iPhone

A20,092. Even accepting that dubious premise, the difference in price between the iPhone and a basic handset that can only make phone calls has nothing to do with any technology necessary to comply with a cellular communications standard. There is, accordingly, no reason why Motorola should be allowed to capture any portion of that price difference. *See LaserDynamics*, 694 F.3d at 67 ("a

useful commodity-type feature that consumers expect will be present in all laptop[s]" does not drive demand for any particular laptop).

Indeed, allowing Motorola to invoke the entire market value exception here would violate the nondiscrimination principle underlying FRAND. *See* A20,484-85.

	until	
and		

See supra at 8-9. Apple should not be required to pay more for the same technology simply for incorporating it in sophisticated devices, where that technology had nothing to do with the increased value of the device.

Motorola contends that its use of the entire market value exception in calculating a royalty was harmless, because Ms. Mulhern provided a "cross-check on the reasonableness of the royalty" by examining the profit differentials between the iPhone and the iPod Touch. MB 58. While a *portion* of that profit differential may be "directly associated with cellular technology," *id.*, Ms. Mulhern had no basis for attributing the *entire* differential to the

A20,116, such that

Giled: 04/25/2013 Confidential Material Omitted

A19,168. Apple, not Motorola,

figured out how to combine cellular communications functionality with the iPhone's other features; it was that combination that attracted consumers. A20,093.

Motorola also suggests that it does not matter whether it improperly used the selling price of accused devices in its royalty calculation, because "where that royalty base is reduced, Motorola's royalty rate would necessarily increase." MB 57. But "[t]he Supreme Court and this court's precedents do not allow consideration of the entire market value of accused products for minor patent improvements simply by asserting a low enough royalty rate." Uniloc, 632 F.3d at 1320; see also LaserDynamics, 694 F.3d at 67; Lucent, 580 F.3d at 1338.

Motorola asserts that in any event, the propriety of the royalty base is for the jury to decide. MB 56. On this record, that, too, is incorrect. This Court has warned of "the danger of admitting consideration of the entire market value of the accused [device] where the patented component does not create the basis for customer demand." *Uniloc*, 632 F.3d at 1320; *see Lucent*, 580 F.3d at 1336. The "[a]dmission of such overall revenues, which have no demonstrated

correlation to the value of the patented feature[s] alone, only serve to make a patentee's proffered damages amount appear modest by comparison, and to artificially inflate the jury's damages calculation beyond that which is 'adequate to compensate for infringement."" *LaserDynamics*, 694 F.3d at 68; *see Uniloc*, 632 F.3d at 1320; FTC Report at 210.

# C. Motorola Presented No Evidence Linking The Proposed Apportionment Of The Portfolio Value To The Claimed Inventions

Even if Motorola properly considered revenues from the accused devices in calculating its proposed royalty award, its proposed apportionment of the portfolio value to the patents in suit is "unrelated to the claimed invention[s]." *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 869 (Fed. Cir. 2010). The district court properly dismissed Motorola's damages claim on that basis.

Motorola purports to charge 2.25% for "hundreds" of SEPs. MB 1. Even assuming 2.25% is a proper rate for Motorola's entire portfolio— Motorola's counsel admitted that he could not prove that, A140—the entire portfolio is not in suit here. Motorola nevertheless claims that as compensation for the infringement of either the '559 and '898 patents,

or the '898 patent alone, it is entitled to "40 to 50 percent" of the portfolio value (whether the portfolio value is calculated based on the price of the accused devices, or using Ms. Mulhern's "cross-check," MB 58). A139; *see* A20,104; MB 62-63.

Motorola does not dispute that this proposed apportionment has nothing to do with the merits or relative importance of the inventions claimed by the '559 and '898 patents. Motorola leans on the testimony of Charles Donohoe, a former Samsung employee, "who opined that in practice a single patent within a standards-essential patent portfolio, presumed valid and infringed, would command 'a disproportionate share of the overall portfolio rate,' '40 to 50 percent of the overall rate."" MB 62. As an initial matter, as the district court found, Mr. Donohoe "admitted that he knows nothing about the portfolio that includes the '898 patent; his 40-to-50 percent figure is a statement about portfolios of standards-essential telecommunications patents in general." A138-39. Motorola does not dispute the point. MB 62. The other "fact testimony" Motorola cites (at 63) is no different. See, e.g., A20,102.

More importantly, none of this evidence amounts to the required proof "associat[ing] [the] proposed royalty with the value of the

patented method." *Riles*, 298 F.3d at 1312; *see ResQNet*, 594 F.3d at 869. Motorola did not even bother to adjust its 40-to-50-percent apportionment when the '559 patent dropped out of the case. In any event, as the district court noted, "if the proper pricing is nonlinear," as Motorola asserts, then it "would need evidence that the '898 patent is not *less* valuable than the average patent in the portfolio." A139. But Motorola "hasn't presented any such evidence." *Id*.

An SEP owner will still enjoy substantial rewards for its innovation, even without the benefit of an injunction, for the reasons noted above (at 34). But Motorola insists that it must be awarded half its portfolio value based on the infringement of any one or two SEPs it decides to assert because, "[a]s a practical reality, we cannot sue on a hundred patents in one case, or 75." A139. Patent law does not recognize a volume discount. Before Motorola is entitled to compensation "for ... infringement," 35 U.S.C. § 284, it actually has to claim and prove the infringement in a court proceeding where Apple has the opportunity to defend itself. The history of this case, where the district court found that Apple did not infringe the '559 or '712 patents, underscores the danger of presuming that Apple is infringing a patent just because Motorola has declared it standard-essential.

Allowing a jury to award damages based on evidence that is not "link[ed] ... to the infringed patent" is "legal error." *ResQNet*, 594 F.3d at 871.

### IV. THE DISTRICT COURT CORRECTLY DETERMINED THAT MOTOROLA'S FRAND COMMITMENT BARS INJUNCTIVE RELIEF HERE

Motorola struggles to explain why money would not suffice as compensation for use of patents that it repeatedly vowed to license on FRAND terms. But it does not struggle at all to explain—indeed, does not even mention—its latest commitment, in the form of an FTC consent decree, "not [to] file a claim seeking, or otherwise obtain or enforce" an injunction (at least not without making irrevocable offers to license and arbitrate, which it has not done). FTC Decision at 9. The omission is glaring, because this latest commitment raises serious questions as to this Court's jurisdiction to consider Motorola's demand that this Court "remand and direct the district court [to] determine Motorola's right to an injunction." MB 71. Even if this Court were to oblige, the relief would do Motorola no good; the consent decree would still block Motorola from pursuing injunctive relief on remand. Thus, this dispute is moot because it "is no longer embedded in any actual controversy about the plaintiffs' particular legal rights." *Already, LLC v. Nike, Inc.*, 133 S. Ct. 721, 727 (2013) (citation omitted). In any event, Motorola's demand is meritless.

# A. The District Court Correctly Determined That Motorola Cannot Show Irreparable Injury Or Inadequacy Of Damages

In *eBay, Inc. v. MercExchange, L.L.C.*, the Supreme Court held that a court must deny a permanent injunction against infringement unless the patentee satisfies the familiar four-factor test. 547 U.S. 388, 391 (2006). Motorola makes the puzzling assertion that the district court "failed to apply the *eBay* factors" when it rejected Motorola's claim for injunctive relief on the basis of its FRAND commitments. MB 71 (capitalization omitted). That is demonstrably untrue: In a paragraph that *cites eBay*, the district court correctly stated that "the alternative of monetary relief must be inadequate" before an injunction may issue. A143. The district court determined that Motorola's multiple promises to license its patents on FRAND terms reflects that a royalty provides adequate compensation for use of those patents, making an injunction

# Confidential Material Omitted

inappropriate. A140-41. It then concluded that Motorola was "not entitled to an injunction" because "[a] FRAND royalty would provide all the relief to which Motorola would be entitled if it proved infringement of the '898 patent." A143. In other words, the district court held that Motorola did not satisfy the first two *eBay* factors—irreparable harm and inadequacy of damages.

That was correct. This Court has held that where a patentee "sought to broadly and extensively license [its] technology ... including a campaign to secure a license from [the alleged infringer] itself, ... no fact finder could reasonably conclude that [the patentee] would be irreparably harmed by the payment of a royalty (a licensing fee)." *ActiveVideo*, 694 F.3d at 1339; *see Polymer Techs., Inc. v. Bridwell*, 103 F.3d 970, 974 (Fed. Cir. 1996); FTC Report at 235. That rule is all the more compelling, where, as here, the patentee has made a universal commitment to license an entire industry, including the very defendant in this case, and throughout this litigation has touted its extensive licensing of its SEP portfolio, pocketing **Constant**. *See, e.g.*, MB 9-10; A118,883.

A FRAND commitment implements a quid pro quo: The patent holder receives the extraordinary benefit of having its patent included in the standard—with the guaranteed flow of royalties from a large population of standard implementers—and in exchange promises not to leverage that position to extract supra-competitive royalties. *See Apple, Inc. v. Motorola Mobility, Inc.,* No. 11-cv-178-bbc, 2012 WL 5416941, at \*12 (W.D. Wis. Oct. 29, 2012). FRAND is a voluntary business decision that reflects a patent holder's choice "to monetize its IP through broad licensing on reasonable terms rather than through exclusive use." Comment of FTC, *Certain Wireless Commc'n Devices, Portable Data Processing Devices, Computers, and Components Thereof,* ITC Inv. No. 337-TA-745 (June 6, 2012).

That is why multiple federal courts have reached the same conclusion as the district court. *See Microsoft*, 696 F.3d at 885; *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2012 WL 5993202, at \*6-7 (W.D. Wash. Nov. 30, 2012); *Realtek Semiconductor Corp. v. LSI Corp.*, No. C-12-0345HRMW, 2012 WL 4845628, at \*6 (N.D. Cal. Oct. 10, 2012). Motorola has not identified any contrary authority. Indeed, when convenient, Motorola itself has taken this position. *See* A136,720-21.

*eBay* did not override Congress's direction that injunctions may issue only "in accordance with the principles of equity." 35 U.S.C. § 283. Under equitable principles, the Supreme Court has counseled, an injunction "is a drastic and extraordinary remedy, which should not be granted as a matter of course." *Monsanto Co. v. Geertson Seed Farms*, 130 S. Ct. 2743, 2761 (2010). As Motorola acknowledges, it must clear a "high bar" to obtain injunctive relief. MB 4. The district court's analysis was faithful to the Supreme Court's teaching that "[i]f a less drastic remedy" is "sufficient to redress [plaintiffs'] injury, no recourse to the additional and extraordinary relief of an injunction [is] warranted." *Monsanto*, 130 S. Ct. at 2761; *see, e.g., ActiveVideo*, 694 F.3d at 1337-39.

Motorola asserts that the unavailability of injunctive relief will strip SEP holders of their rights to reciprocity. MB 73-74. Not here:

A139,142-209. That fact demonstrates a more fundamental

flaw: The availability of injunctive relief to Motorola has nothing to do with any commitment by other SSO members to cross-license.

Motorola's real argument is that it needs the threat of an injunction to bring Apple to the negotiating table to obtain damages. A142; MB 64-65, 72-73. Using an injunction to generate negotiating leverage is precisely what FRAND is meant to prevent. "A royalty negotiation that occurs under the threat of an injunction may be heavily weighted in favor of the patentee in a way that is in tension with the [FRAND] commitment." FTC Br. 6. Standardization creates the risk that an SEP holder will charge an implementer—who must comply with the standard in order to compete, and who will have sunk costs into investments tied to the standard—a license rate that reflects hold-up value, not the SEP's intrinsic value. The hammer of an injunction, "and the potentially serious sanctions arising from its violation, can be employed as a bargaining tool to charge exorbitant fees" that are greater still. eBay, 547 U.S. at 396 (Kennedy, J., concurring). District courts should not award equitable remedies to endow parties with bargaining chips. See, e.g., Hynix Semiconductor, Inc. v. Rambus Inc., 609 F. Supp. 2d 951, 983 n.29 (N.D. Cal. 2009).

Motorola's suggestion that without injunctions, potential licensees will refuse to negotiate and force SEP holders to bring serial infringement lawsuits to secure "at most" the FRAND royalties they deserve, is unpersuasive. MB 69-70. There is nothing unfair in requiring Motorola to establish that it owns a valid and infringed patent; that is the responsibility of every patent plaintiff. And "injunctive relief ought not to act as a form of 'extra damages' to compensate for litigation costs." Innogenetics, N.V. v. Abbott Labs., 512 F.3d 1363, 1380 n.8 (Fed. Cir. 2008). Moreover, the concern is fanciful because potential licensees have plenty of incentive to negotiate. As the district court noted, a standards implementer who rejects a FRAND rate risks having a fact-finder impose a higher rate—on top of substantial litigation expense. A142. Plus, a potential licensee who acts as Motorola describes risks treble damages for willful infringement and an award of attorneys' fees to the patentee. See 35 U.S.C. §§ 284, 285. "The possibility that adequate compensatory or other corrective relief will be available at a later date, in the ordinary course of

litigation, weighs heavily against a claim of irreparable harm." Sampson v. Murray, 415 U.S. 61, 90 (1974).<sup>4</sup>

Completely apart from these FRAND issues, this Court could dispose of Motorola's claim for injunctive relief because Motorola produced no evidence that infringement of the '898 patent caused any harm to Motorola's sales. To the contrary, Apple demonstrated that the network operated by its service provider, AT&T, does not even use the '898 patent's countdown feature. A139,627-31, 139,883-85, 139,922-23, 139,954-56, 140,269-70.

But even if the '898 patent is valid, infringed, and essential, Motorola could not show, and has not tried to show, that the infringement caused it any harm, much less harm that warrants an injunction. *Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1148 (Fed. Cir. 2011) (requiring proof that plaintiff "has suffered an irreparable injury"). Standard-essential functionality would not, for example, drive consumers to buy any particular company's product. No

<sup>&</sup>lt;sup>4</sup> Motorola's objection (at 61) that its FRAND contract with ETSI does not explicitly bar injunctive relief is beside the point. The district court's rationale was not that the contract explicitly bars injunctions. A140-41.

one chooses a Cadillac over other cars because it has spark plugs that comply with industry standards. *See supra* at 34-35.<sup>5</sup>

# B. The Balance Of Hardships And Public Interest Factors Favor Apple

Having determined that Motorola could not satisfy the first two *eBay* factors, the district court had no need to address the other two requirements. But it did address them conceptually and correctly found that they cut in Apple's favor.

The balance of hardships tilts sharply in Apple's favor. If an injunction does not issue, Motorola can pursue monetary relief precisely what it bargained for when it entered into FRAND contract with the SSOs. But if an injunction does issue, Apple must either negotiate with a gun to its head, engage in costly and unnecessary

<sup>&</sup>lt;sup>5</sup> This Court has recently held that a patentee seeking a preliminary injunction cannot establish irreparable injury based on the sales of an infringing product without evidence "that the infringing feature drives consumer demand for the accused product." *Apple, Inc. v. Samsung Elecs. Co., Ltd.* ("*Apple II*"), 695 F.3d 1370, 1375 (Fed. Cir. 2012), *petition for reh'g en banc petition denied* (Jan. 31, 2013). This "causal nexus" requirement (*id.*) cannot be reconciled with *eBay* or with this Court's cases awarding preliminary injunctive relief without a causal nexus inquiry. *See, e.g., Robert Bosch*, 659 F.3d 1142. Regardless, Motorola has not shown any causal nexus, much less a "sufficiently strong" causal nexus, *Apple II*, 695 F.3d at 1376, between Apple's alleged infringement and any injury Motorola has suffered.

design-around (if design-around is indeed possible), or pull its iPhones and iPads from shelves. Any of those courses would inflict grievous harm on Apple and award Motorola a disproportionate windfall, as the district court observed. A140-41; FTC Br. 11-12.

Likewise, injunctive relief with respect to SEPs disserves the public interest. If an injunction forces Apple to withdraw its immensely popular mobile devices from the market, customers are the obvious losers. See Edwards Lifesciences AG v. Corevalve, Inc., 699 F.3d 1305, 1315 (Fed. Cir. 2012). But even an injunction that results only in Apple taking a greater-than-FRAND royalty results in greater costs to consumers and undermines robust standard-setting regimes. See A141: Oversight of the Impact on Competition of Exclusion Orders To Enforce Standard-Essential Patents: Hearing Before the S. Comm. on the Judiciary, 112th Cong., at 7 (2012) (testimony of Edith Ramirez, Comm'r, Fed. Trade Comm'n). The FTC emphasized these very concerns in justifying its complaint, and resulting consent decree, against Motorola, FTC Complaint ¶ 3-steps the FTC was authorized to take only if Motorola's stance was against the public interest. See supra at 11-12.

#### C. The District Court Did Not Adopt A "Categorical" Rule Against Injunctions

Motorola's central theme is that the district court announced "a categorical rule barring injunctions for all FRAND-committed patents." MB 66; *see* MB 3, 6, 19, 63, 68-71, 74 n.11. Not so. The district court said that Motorola could obtain injunctive relief for infringement if "Apple refuses to pay a royalty that meets the FRAND requirement." A140. That was no mere "qualification." MB 64. It was a critical limitation on the scope of the district court's ruling that aligns the decision below with *eBay* by identifying the precise situation where monetary relief is inadequate.

Misperceiving the nature of that limitation, Motorola then criticizes the district court for "refus[ing] to consider the actual facts of this case" in declining to resolve the parties' competing accounts of why negotiations did not result in a licensing agreement. MB 64 (citing A140, 142); *see* Qualcomm Br. 6. As the district court understood, untangling that knot was "unnecessary." A142. To obtain an injunction against infringement of an SEP under the district court's ruling (and in accordance with ordinary equitable principles), a patentee must clear several hurdles. First, the patentee must, of course, establish actual

infringement of a valid patent. (Motorola's efforts to do so with respect to the SEPs asserted in this litigation have met with dismal results. *See supra* at 10.) Next, the patentee must produce competent evidence of the value of the infringed patent *as an individual patent*, not one in a portfolio of hundreds of patents the owner has unilaterally deemed valid and essential but that may be neither. A neutral adjudicator, such as an arbitrator or a court, must then determine a FRAND rate for a license to practice the individual infringed patent. Finally, no injunction can lie unless the would-be licensee refuses to pay the adjudicated rate even while continuing to infringe. Not until this final step—after a patentee has proven the infringed patent's value—is the course of negotiations even relevant.

Motorola wants the opportunity to prove that the '898 patent is valid and infringed to secure an injunction, but Motorola cannot satisfy any of the other preconditions. First, Motorola failed to provide any reliable evidence as to the value of the patent and thus could not establish that any rate was consistent with its FRAND obligations. As the district court correctly concluded, Motorola produced no admissible evidence that the '898 patent has any individual value. *See supra* at

Case: 12-1548 Document: 176 Page: 69 Filed: 04/25/2013

Confidential Material Omitted

24-40. Thus, Motorola's assertion that 2.25% of all Apple sales was a FRAND offer for a license to Motorola's portfolio of SEPs is unsubstantiated. Second, Motorola's obligation to offer a FRAND license rate is not discharged by Apple's decision not to make a counteroffer to Motorola's 2.25% portfolio demand. Even assuming Motorola owns a single valid and infringed patent, no neutral arbitrator has determined that 2.25% of accused device sales is a reasonable portfolio price. As noted above, Motorola's counsel admitted that he could not prove that was the right price. A140. The record evidence establishes that it is not.

A139,375-76,

A104,548. Indeed, the FTC has

confirmed that Apple was "at all times" a "willing licensee[] of [Google/Motorola's] FRAND-encumbered SEPs." FTC Complaint ¶ 25; see FTC Analysis at 3.

In light of these facts, the district court correctly declined to inquire why negotiations broke down.

Nor is the district court's rule "categorical," in violation of *eBay*, merely because it applies to all FRAND commitments substantially similar to Motorola's promises to IEEE and ETSI. eBay rejects analytical approaches that short-circuit "the traditional four-factor framework that governs the award of injunctive relief." 547 U.S. at 394. Here, the district court reached its FRAND ruling by applying the eBay factors in light of Motorola's categorical FRAND promise. If the district court's holding in this case has broad ramifications, that is only because of the sweep of Motorola's FRAND obligations. "Discretion is not whim, and limiting discretion according to legal standards helps promote the basic principle of justice that like cases should be decided alike." 547 U.S. at 395 (Roberts, C.J., concurring) (citation omitted). eBay does not foreclose the application of legal rules that transcend particular cases; not all such legal rules are impermissibly categorical. See Robert Bosch, 659 F.3d at 1150-52; Voda v. Cordis Corp., 536 F.3d 1311, 1329 (Fed. Cir. 2008).

#### **REPLY ARGUMENT**

# I. THE DISTRICT COURT ERRONEOUSLY LIMITED THE CLAIMS OF THE '949 PATENT BY MISAPPLYING MEANS-PLUS-FUNCTION RULES

A. The Claims Are Not Means-Plus-Function Claims Because They Neither Recite A "Means" Nor Exhibit Exceptional Characteristics That Override The Drafter's Choice

Motorola concedes that claim 1 of the '949 patent "does not use the words 'means' or 'means for," MB 21, and that consequently there is a "presumption"—a "strong" one, *Lighting World, Inc. v. Birchwood Lighting, Inc.*, 382 F.3d 1354, 1358 (Fed. Cir. 2004); AB 23-24—"against construing the limitation as means-plus-function," MB 21. Motorola makes two arguments to try to fit this case within the "unusual" circumstances where it is permissible to override the drafter's decision not to expressly invoke means-plus-function treatment. *Lighting World*, 382 F.3d at 1362. Neither is persuasive.

The first is an argument the district court did not accept. Motorola invokes this Court's observation that "the generic terms mechanism, means, element, and device, typically do not connote sufficiently definite structure" to "avoid means-plus-function treatment," MB 22, quoting a case that used the word "mechanism,"

# Confidential Material Omitted

"unadorned" by any "structural context" elsewhere in the claim, Welker
Bearing Co. v. PHD, Inc., 550 F.3d 1090, 1096 (Fed. Cir. 2008).
Motorola argues that "[t]he term 'heuristic' is similarly generic." MB
22.

In support of that view, Motorola incorrectly asserts that the inventors could not "define what 'heuristics' meant." MB 21 (citing A5054, 5046). In fact, in the cited passages, the inventors merely explained that

A5054, and refers to

A5046. But the various inventors had no trouble explaining what the term meant in the context of *these claims*. A5023, 5035, 5040, 5072. Motorola does not deny that its own patents claim "heuristics," AB 26, nor that the specification explains that "heuristics" are "used to translate imprecise finger gestures into actions desired by the user," A543, col. 109:50-51, and gives some examples of next-item heuristics. *See* AB 22.

In light of this testimony and the specification, the district court had no trouble construing "heuristic" to mean "one or more rules to be applied to data to assist in drawing inferences from that data." A45-46; see AB 20-22. Motorola does not challenge this construction—or even acknowledge that it must do so in order to sustain its position that the term is inherently indefinable.

Motorola's second argument, echoing the district court, is that the claim lacks "sufficient structure." MB 22-23. It asserts that the claim recites nothing but "a generic function of a general purpose computer" and the law is, therefore, "well-settled that ... the claim must be interpreted" as means-plus-function. MB 22. Motorola ignores Apple's argument that the claim recites no fewer than nine limitations that provide more structure than any such "generic function." AB 26. Even more importantly. Motorola does not even cite, much less respond to. the two cases, discussed extensively in Apple's brief, finding sufficient structure in claims that (unlike claim 1) recited little more than "computing unit." AB 27-29 (discussing Inventio AG v. ThyssenKrupp Elevators Am. Corp., 649 F.3d 1350 (Fed. Cir. 2011) and LG Elecs., Inc. v. Bizcom Elecs., Inc., 453 F.3d 1364 (Fed. Cir. 2006)).

Instead of grappling with cases that are directly on point, Motorola mischaracterizes *Aristocrat Technologies Australia PTY Ltd*. *v. International Game Technology*, 521 F.3d 1328, 1333 (Fed. Cir. 2008), as standing for the proposition that "[a] generic computer alone does not describe the structure needed to carry out the described function." MB 23. Not even close. This Court applied means-plus-function analysis there because the patentee "*elected* to claim using section 112 paragraph 6" by using "means." *Aristocrat*, 521 F.3d at 1335 (emphasis added). The three other cases Motorola cites are of similar ilk: Each concerned whether undisputed means-plus-function claims were indefinite, not whether means-plus-function treatment applied in the first place. *See* MB 22-23.

That leaves Motorola to rest on nothing but an academic "working paper." MB 21. But that paper acknowledges that this Court does *not* apply means-plus-function treatment to claims like those in the '949 patent. *See* Mark A. Lemley, *Software Patents and the Return of Functional Claiming* (July 25, 2012), Stanford Public Law Working Paper No. 2117302, at 16-24 *available at* http://bit.ly/174iOAR (cited at MB 21).

# **B.** If The Claims Are Means-Plus-Function Claims, The Specification Includes Sufficient Structure

As an alternative rationale for affirming the district court's ruling, Motorola argues that the district court erred "in finding that there was

sufficient structure in the specification linked to each of the claimed functions" and thus claim 1 is invalid as indefinite. MB 23. Motorola fails to acknowledge, much less apply, the indefiniteness standard. "All one needs to do" is "recite *some structure* corresponding to the means in the specification." *Atmel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1382 (Fed. Cir. 1999) (emphasis added). "[T]his is not a high bar." *Biomedino, LLC v. Waters Techs. Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007).

Motorola fixates on two figures in the patent, insisting they do not disclose enough. MB 24-25 (discussing Figures 16A and 39C). Motorola ignores the fact that the specification describes the figures at length. *E.g.*, A520, col. 64:17-48; A543, col. 109:50-110:2; A544, col. 111:29-49; A545, col. 113:52-62. Motorola's main point is that the patent cannot be valid unless it "disclose[s] an algorithm that uses ... variables"—such as "speed, acceleration"—"to interpret a finger gesture." MB 26. Such details are unnecessary if "one skilled in the art would know the kind of program to use." *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1214 (Fed. Cir. 2003). Apple's expert confirmed that "[a] person of ordinary skill in the art would find it unnecessary to need the disclosure of specific algorithms or code in the specification of the '949 patent, because a person of ordinary skill would be able to take the descriptions in the '949 patent and write program code without difficulty to implement the invention." A7132. Motorola bears the burden of proof here yet presents no contrary evidence. MB 23-26.

Contrary to Motorola's assertion (at 23-24), this is not like *Aristocrat*, where the proposed corresponding structure "impose[d] no limitation whatsoever." 521 F.3d at 1334. The specification discloses heuristics that perform the claimed functions by *using particular touch gestures as inputs*. A91-95. A heuristic that includes some touch gestures and excludes others limits the claims. Indeed, Motorola argued that its products use *different* structures than the claimed invention, because they used *different* touch gestures as inputs. A13,280-82.

#### C. The Specification Describes A "Next Item Heuristic" That Covers Horizontal Swipes

Even if the means-plus-function statute applies here, the district court erred in limiting the "next item heuristic" to one that uses as an input a tap on the right edge of the touchscreen. AB 30-33. Motorola does not contest that a means-plus-function claim "encompasses *all* 

*structure* ... described in the specification" for performing the claimed function. *Micro Chem., Inc. v. Great Plains Chem. Co., Inc.,* 194 F.3d 1250, 1258 (Fed. Cir. 1999). So the key question is whether the specification *ever* describes a "next item heuristic" involving a horizontal swipe. It does, AB 30 (citing five figures and five passages), and emphasizes the value of giving users various options, AB 31. That should be the end of the analysis.

Motorola does not change anything by pointing to one figure from the '949 patent, Figure 39C, where a horizontal swipe triggers a screen movement rather than a "next item" command. MB 27. This is one embodiment, A520, col. 64:25-26; it does not negate all the other places where the specification describes a horizontal swipe that flips to the next item.

Motorola does not dispute that the district court misunderstood the invention when it asserted that "the same user finger movement" cannot be "understood to communicate two separate commands." A93.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> Apple's opening brief observed that the district court apparently "confused" claims 1 and 10 by reasoning that the claim 1 "twodimensional" translation heuristic necessarily encompasses horizontal scrolling. AB 31-32; *see* A93. Of course, why the district court made the mistake is far less important than the fact that it was a mistake.

Specifically, Motorola does not dispute that the specification describes an invention where a horizontal swipe can mean "next item" or a horizontal scroll, depending on context, or that claim 1 does not require the device to turn to the next item at every horizontal swipe in every app running on the device. AB 31-32.

Motorola merely responds that the district court declined to consider this argument because Apple made it only in the motion for reconsideration. MB 28. Motorola does not explain how Apple was supposed to point out the district court's mistake *before* the district court made it. But regardless, Apple is allowed to "present[] new or additional arguments in support of 'the scope of its claim construction''' so long as it is presenting the "same construction on appeal as was presented to the district court," which it is. *O2 Micro Int'l v. Beyond Innovation Tech. Co., Ltd.,* 521 F.3d 1351, 1359-60 (Fed. Cir. 2008) (quoting *CCS Fitness, Inc. v. Brunswick Corp.,* 288 F.3d 1359, 1370-71 (Fed. Cir. 2002)).

Nevertheless, Motorola goes out of its way to quote the district court's criticism. MB 27-28. But the criticism was of a different argument. *See* A12,689-90.

Case: 12-1548 Document: 176 Page: 79

## II. THE DISTRICT COURT ERRONEOUSLY CONSTRUED TWO TERMS IN THE '647 PATENT

# A. The District Court Erred When Construing "Analyzer Server"

The dispute over the construction of "analyzer server" revolves around whether the claim requires that the server be "separate from a client that receives data," as the district court held, A78, or whether the server is simply one or more subroutines, as Apple contends here, AB 34-35, and HTC (represented by the same counsel as Motorola) and the ITC Staff all agreed in another proceeding, AB 34 (discussing A9883-84). Even Motorola agreed that the analyzer server is

#### A10,565.

Motorola asserts that "Apple presents no ... evidence" from the "intrinsic evidence" in support of its position. MB 32. But Motorola simply ignores (without disputing) the intrinsic evidence Apple presented in its brief: (1) the claim itself refers to an "analyzer server" and does not indicate in any way the extra limitation that the server must be separate from the client; (2) indeed, the patent does not even mention the "client"; (3) the inventors knew how to write claims (claims 3 and 10) that require that a separate program provide the data to the analyzer server, A176, col. 7:27-32, 56-62; AB 35, but opted not to do so for claim 1; and (4) the text of the specification describes the "analyzer server" in terms that do not in any way separate it from a client that receives data, AB 34 (quoting A173, col. 2:28-30).

Motorola responds directly only to the third point, with a lengthy argument that its construction would still give claims 3 and 10 *some* meaning beyond the scope of claim 1. MB 33-34. Even if true, that does not in any way diminish the point that when the drafters wanted to require that a separate program provide the data to the analyzer server, they said it explicitly.

In the face of all this intrinsic evidence, Motorola, echoing the district court, points to only a single figure (Figure 1) in the intrinsic record, a schematic where the server is depicted in a separate box from the "Application." MB 32. But Motorola does not dispute that pointing to a preferred embodiment is never enough without clear evidence that the patentee intended to limit the claim to the preferred embodiment. AB 35. And Motorola has not even argued that Figure 1, alone, qualifies as clear evidence of such an intent.

Motorola contends that construing "analyzer server" as a "program routine" reads the word "server" out of the claim. MB 34. To

the contrary, Apple's construction gives meaning to the term "server," defining it as a service that includes various functionalities. A10,565. That use of "server" would be familiar to one of ordinary skill in the art. *Id*.

Motorola argues that "server" "has a specific meaning—a separate component that serves *various* [i.e., multiple] clients." MB 34 (emphasis added). But the '647 patent does not require that the analyzer server interact with multiple clients. In fact, Figure 1, the keystone of Motorola's argument, depicts an analyzer server that interfaces with only a *single* application. A163, 174, col. 3:36-38, 4:1-8. If Motorola's proposed "client/server" model is one where the server must serve multiple clients, then the '647 patent does not use "server" in that way. Motorola's attempt to limit the claims by resort to this supposed "ordinary meaning" of "server" is meritless.

#### B. The District Court Erred When Construing "Linking Actions To The Detected Structure"

As Motorola correctly reports, the district court construed "linking actions to the detected structures," A176, col. 7:9-24, 50-51, to mean (in relevant part) "creating a *specified connection* between each detected structure and at least one computer subroutine," A78-79 (emphasis

added). Motorola acknowledges (at 35) that the central focus of Apple's appeal of that construction is on the emphasized language. *See* AB 36-38. But Motorola does not defend that inserted language or the reason the district court gave for the interlineations.

Instead, Motorola challenges a completely unrelated aspect of Apple's proposed construction, which referred to "associating [rather than *linking*] detected structures to computer subroutines that cause the CPU to perform a sequence of operations on the particular structures to which they are associated." A6530 (emphasis added). That word choice mirrors the Background of the Invention and the Summary of the Invention, both of which speak in terms of "a system ... that identifies structures, associates candidate actions to the structures," etc., A173, col. 1:66-2:2; see id., col. 2:4-9, 17-20 (almost verbatim). And Motorola is just wrong to say that the patent "draws a distinction between associating and linking," MB 35-nothing in claim 5 suggests that linking should be anything other than what is specifically described in the Background of the Invention and the Summary of the Invention. More importantly, the choice is inconsequential. The battle below was never about that word choice.

This Court could adopt the district court's use of "creating" or Motorola's proffered "linking" while correcting the challenged insertion of "specified connection." *See Praxair, Inc. v. Advanced Tech. Materials, Inc.*, 543 F.3d 1306, 1323-24 (Fed. Cir. 2008).

Motorola does acknowledge Apple's separate argument that the district court's construction of claim 1 is wrong because it requires linking "at least one" action to each structure when, in fact, claim 1 requires linking "actions [plural] to the detected structures." A176, col. 7:15-17.7 But Motorola does not respond to Apple's central point that unasserted claims 13-24 require "linking *at least one action* to the detected structure," A176-77 (emphasis added), indicating that the drafters used that phrase explicitly when that is what they meant, AB 37-38.

Motorola ignores these same claims when it points out that there is an embodiment (in Figure 4) in which there is a structure (a "date grammar") that links to only one associated action ("Put in electronic calendar"). A166. It is enough that this feature is fully consistent with

<sup>&</sup>lt;sup>7</sup> In the earlier ITC investigation, the ALJ adopted Apple's construction on this point over HTC's objections. A9884, 9887-88. Unquestionably, the ALJ and district court adopted conflicting constructions. *Cf.* MB 33-34.

the various other claims. There is no rule that every single embodiment must be covered by every single claim.

## III. MOTOROLA HAS RAISED AN ERRONEOUS CONSTRUCTION OF THE TERM "REALTIME API" IN THE '263 PATENT

The district court ruled that the term "realtime API" used in claims 1 and 2 refers to "an 'API that allows realtime interaction between two or more subsystems." A68. Motorola (at 29-31) challenges this construction. But the specification repeatedly states that an API "receives commands from an application program, through the handler ... and instructs the real-time engine to carry out the necessary transforms which relate to the function of the virtual device being implemented." A187, col. 6:25-38. See also id. at col. 5:21-29; A188, col. 7:44-51; A189, col. 9:28-32, 10:27-44, 53-58; A190, col. 11:28-42; A180. And the prosecution history, like the specification, describes an API as an interface to a realtime subsystem that allows the realtime subsystem to function in realtime. See A6300 ("a series of application programming interfaces (APIs)" "is interposed between the adapter handler [part of the host subsystem] and the realtime engine"); A6300-01.

Contrary to Motorola's assertion (at 29), the district court's construction does not read the realtime requirement out of the term "realtime API." Instead, the district court's construction accounts for the "realtime capabilities or functionality" of the API by requiring that the API "allow[] the realtime subsystem to playback data to the user in realtime." A6346.

The specification does not require that the API itself must always be "realtime," as Motorola proposes. MB 29-31. As the district court found, "[n]either the specification nor the prosecution history suggests that the realtime API disclosed in claim 1 must itself have realtime functionality, as by facilitating constant bit-rate handling." A67. The specification consistently teaches that the realtime API is intended to "handle *any* type of data." A178 (emphasis added); *see* A189, 10:61-63; A190, col. 11:16-18; A6347-50.

Motorola suggests that "realtime API" should be construed to mean an "API facilitating constant bit rate data handling." MB 30. Although the patent refers (in one embodiment) to "data that is transmitted at a constant bit rate and that must be processed in real time," A185, col. 2:31-33, the specification does not limit realtime APIs

to this type of data, nor does it disclose any embodiment where the API itself performs the constant bit rate processing, A68.<sup>8</sup>

Motorola suggests that because the patent uses the term "realtime API" in claim 1 and "API" in claim 31 then those two terms must be defined differently. MB 29. But "[d]ifferent terms or phrases in separate claims may be construed to cover the same subject matter where the written description and prosecution history indicate that such a reading ... is proper." *Hologic, Inc. v. SenoRx, Inc.*, 639 F.3d 1329, 1337 (Fed. Cir. 2011). That is the case here. The specification uses the terms "API" and "application program interface" interchangeably to describe the "realtime API" of the claims. *See, e.g.*, A187, col. 5:21-25; A189, col. 10:26-44, 54-58.

## IV. THE DISTRICT COURT ERRONEOUSLY CONCLUDED THAT APPLE COULD NOT ESTABLISH DAMAGES FOR MOTOROLA'S INFRINGEMENT

'949 patent. Motorola does not dispute that as a general matter,

it is permissible to estimate damages by looking to the value of

<sup>&</sup>lt;sup>8</sup> Motorola also proposes another construction for "realtime API"— "an API that itself has defined upper bounded time limits." MB 30. Motorola concedes (MB 30 n.4) that this construction was not timely presented to the district court. Moreover, nothing in the intrinsic record supports such a construction.

benchmark commercial products that use comparable technology. See, e.g., i4i Ltd. P'ship v. Microsoft Corp., 598 F.3d 831, 853, 856 (Fed. Cir. 2010). It asserts only that the expert's benchmark, the Trackpad, "contains none of the function asserted from the '949 patent." MB 39. That is true, but it only raises the question of how comparable the gesture features of the Trackpad are to the heuristics covered by the '949 patent. Where, as here, the functions of two products are not "radically different," *Lucent*, 580 F.3d at 1327-29, that question is a "factual issue[] best addressed by cross examination and not by exclusion," ActiveVideo, 694 F.3d at 1333.

'647 patent. Motorola, like the district court, contends that Mr. Napper's analysis is insufficient to create a triable issue on damages because the ITC's construction of the '647 patent was different from the district court's, and because the record does not contain detailed evidence about HTC or the resources it devoted to designing around the patent. MB 40-41.

The former argument fails if this Court properly adopts the construction of the '647 patent that Apple advances. As for the latter, Motorola does not dispute that HTC is a major smartphone

manufacturer that had every incentive to devote substantial resources to designing around the ITC's exclusion order within four months. It was, therefore, reasonable for Mr. Napper to estimate that it would take about four months for Motorola to design around, and to estimate damages based on lost sales over that period. Differences between Motorola and HTC could be adequately addressed on cross-examination.

*'263 patent*. Motorola states that the district court excluded Mr. Napper's testimony "in part" because of his "sole reliance on a biased source"—Apple's technical expert, Dr. Polish—in identifying and pricing a design-around chip. MB 39. That was the *only* basis for the court's ruling, *see* A116, and it is fundamentally flawed.

Motorola embraces the district court's independent source rule but, like the district court, cites no authority to support such a rule. None exists. *See* AB 45; *Dura Automotive Sys. of Indiana, Inc. v. CTS Corp.*, 285 F.3d 609, 613 (7th Cir. 2002) ("[I]t is common in technical fields for an expert to base an opinion in part on what a different expert believes on the basis of expert knowledge not possessed by the first expert."). Indeed, Motorola's damages expert, Ms. Mulhern, relied heavily on another Motorola expert, Mr. Donohoe, in calculating

Motorola's damages. A20,101-02. And courts, including this one, have made clear that questions of bias go to weight, not admissibility. *See* AB 45-47 (citing cases). Motorola contradicts none of this.

Motorola falls back on the argument that Mr. Napper "failed to demonstrate" that the chip Dr. Polish identified is, in fact, a feasible design-around alternative. MB 40. That is an issue that should be resolved at trial through cross-examination of Mr. Napper and Dr. Polish. As Mr. Napper testified,

A22,610. It was reasonable for Mr. Napper to

rely on Dr. Polish's expertise. See AB 45-47 (discussing cases).

## V. THE DISTRICT COURT ERRONEOUSLY CONCLUDED THAT APPLE WAS NOT ENTITLED TO A TRIAL ON INJUNCTIVE RELIEF FOR MOTOROLA'S INFRINGEMENT

Motorola primarily argues that Apple cannot demonstrate a nexus—a causal link—between Apple's loss of smartphone market share and Motorola's copying of the patents at issue. MB 43-45. This argument has no bearing on Apple's argument that it is irreparably harmed because the violation is of its right to elect not to license others to practice the invention. *See, e.g., Presidio Components, Inc. v. Am.*  *Tech. Ceramics Corp.*, 702 F.3d 1351, 1363 (Fed. Cir. 2012) ("unwillingness to license" supported injunctive relief).

Furthermore, Motorola misunderstands any nexus requirement. At a minimum, Apple's identification of relevant evidence indicating that both Motorola and Apple employees believe the infringing features drive consumer demand is sufficient to warrant an evidentiary hearing at which Apple can prove its entitlement to an injunction. *See* AB 65-68.

More fundamentally, Motorola overstates the granularity of any nexus requirement. Motorola argues, for example, that because "the '949 patent does not cover *all* touchscreen gestures," Apple's evidence that its "superior touchscreen interface" drives consumer demand is insufficient to establish a nexus between infringement and harm. MB 44-45. The rule Motorola advocates is unworkable. Apple has shown that Apple's superior touchscreen interface, which includes the touchscreen gestures covered by the '949 patent, is *a* driver of consumer demand for smartphones. AB 62, 65. This is all a nexus element should require.

## CONCLUSION

This Court should affirm the dismissal of Motorola's patent claims but reverse the dismissal of Apple's.

Dated: April 25, 2013

Respectfully submitted,

<u>/S/ E. Joshua Rosenkranz</u> Orrick, Herrington & Sutcliffe LLP 51 West 52nd Street New York, NY 10019 (212) 506-5000

Attorney for Plaintiffs-Appellants

#### **CERTIFICATE OF FILING AND SERVICE**

I hereby certify that on April 25, 2013, I caused the nonconfidential version of the Response and Reply Brief of Plaintiffs-Appellants Apple Inc. and NeXT Software, Inc. to be electronically filed with the Clerk of the Court using CM/ECF, which will automatically send email notification of such filing to the following counsel of record:

Brian Cosmo Cannon Quinn Emanuel Urquhart & Sullivan, LLP 555 Twin Dolphin Drive, 5th Floor Redwood Shores, CA 94065 Email: briancannon@quinnemanuel.com

Edward J. DeFranco Quinn Emanuel Urquhart & Sullivan, LLP 51 Madison Avenue, 22nd Floor New York, NY 10010-1601 Email: eddefranco@quinnemanuel.com

David A. Nelson Quinn Emanuel Urquhart & Sullivan, LLP 500 West Madison Street, Suite 2450 Chicago, IL 60661 Email: davenelson@quinnemanuel.com

Raymond N. Nimrod Quinn Emanuel Urquhart & Sullivan, LLP 51 Madison Avenue, 22nd Floor New York, NY 10010-1601 Email: raynimrod@quinnemanuel.com Kathleen M. Sullivan Quinn Emanuel Urquhart & Sullivan, LLP 51 Madison Avenue, 22nd Floor New York, NY 10010-1601 Email: kathleensullivan@quinnemanuel.com

Stephen A. Swedlow Quinn Emanuel Urquhart & Sullivan, LLP 500 West Madison Street, Suite 2450 Chicago, IL 60661 Email: stephenswedlow@quinnemanuel.com

Charles Kramer Verhoeven Quinn Emanuel Urquhart & Sullivan, LLP 22nd Floor 50 California Street San Francisco, CA 94111 Email: charlesverhoeven@quinnemanuel.com

Amanda Scott Williamson Quinn Emanuel Urquhart & Sullivan, LLP Suite 2450 500 West Madison Street Chicago, IL 60661 Email: amandawilliamson@quinnemanuel.com

Counsel for Cross-Appellants Motorola, Inc. and Motorola Mobility, Inc.

> /s/ E. Joshua Rosenkranz E. Joshua Rosenkranz

#### CERTIFICATE OF COMPLIANCE UNDER FEDERAL RULES OF APPELLATE PROCEDURE 32(a)(7) AND FEDERAL CIRCUIT RULE 32

Counsel for Plaintiffs-Appellants Apple Inc. and NeXT Software, Inc. certifies that the brief contained herein has a proportionally spaced 14-point typeface, and contains 13,870 words, based on the "Word Count" feature of Word 2007, including footnotes and endnotes. Pursuant to Federal Rule of Appellate Procedure 32(a)(7)(B)(iii) and Federal Circuit Rule 32(b), this word count does not include the words contained in the Certificate of Interest, Table of Contents, Table of Authorities, Abbreviations, and Statement of Related Cases.

Dated: April 25, 2013

Respectfully submitted,

<u>/S/ E. Joshua Rosenkranz</u> E. Joshua Rosenkranz