UNITED STATES INTERNATIONAL TRADE COMMISSION WASHINGTON, DC

In the Matter of

CERTAIN INTEGRATED CIRCUITS AND PRODUCTS CONTAINING THE SAME

Inv.	No.	337-TA-
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VERIFIED COMPLAINT OF FREESCALE SEMICONDUCTOR, INC. UNDER SECTION 337 OF THE TARIFF ACT OF 1930, AS AMENDED

COMPLAINANT

Freescale Semiconductor, Inc. 6501 William Cannon Drive West Austin, Texas 78735
Tel: (512) 895-2558

COUNSEL FOR COMPLAINANT

McKool Smith, P.C.

Benjamin Levi 1999 K Street NW, Suite 600 Washington, DC 20006-1101 Telephone: (202) 370-8300 Facsimile: (202) 370-8344

Steve J. Pollinger Pierre J. Hubert Trent E. Campione Christopher J. Mierzejewski Todd Bellaire 300 W. 6th Street, Suite 1700 Austin, TX 78701 Telephone: (512) 692-8700 Facsimile: (512) 692-8744

Robert M. Manley 300 Crescent Court, Suite 1500 Dallas, TX 75201

PROPOSED RESPONDENTS

MediaTek Inc.
No. 1 Dusing 1st Road
Hsinchu Science Park
Hsinchu City 30078
Taiwan

Tel: 011-886-3567-0766

MediaTek USA Inc. 2860 Junction Avenue San Jose, California 95134 Tel: (408) 526-1899

Acer Inc. 8F, 88 Sec. 1, Xintai 5th Road Xizhi, New Taipei City 221 Taiwan Tel: 886-2-2696-1234

AmTRAN Technology Co. Ltd. No. 268, Lien Chen Road 17th Floor Chung Ho City, New Taipei 11235 Taiwan Tel: 886-2-8828-0505

AmTRAN Logistics, Inc., 9351 Irvine Center Drive Irvine, California 92618 Tel: (949) 453-8808

Telephone: (214) 978-4000 Facsimile: (214) 978-4044

Counsel for Complainant Freescale Semiconductor, Inc.

ASUSTek Computer Inc.

No.15, Li-Te Rd. Peitou, Taipei 11259

Taiwan

Tel: 886-2-2894-3447

ASUS Computer International, Inc. 800 Corporate Way Fremont, California 94539

Tal. (510) 720 2777

Tel: (510) 739-3777

BLU Products, Inc. 10814 NW 33rd St # 100 Doral, Florida 33172 Tel: (305) 715-7171

Sharp Corporation 22-22 Nagaike-cho, Abeno-ku Osaka 545-8522 Japan

Tel: 81-6-6621-1221

Sharp Electronics Corporation Sharp Plaza Mahwah, New Jersey 07495 Tel: (201) 529-8200

Sharp Electronics Manufacturing Company of America Inc. 9295 Siempre Viva Road, Suite J-2 San Diego, California 92154 Tel: (619) 671-0960

Toshiba America Information Systems, Inc. 9740 Irvine Boulevard Irvine, California 92618 Tel: (888) 808-6245 x7010

Toshiba Logistics America, Inc. 9740 Irvine Boulevard Irvine, California 92618 Tel: (949) 461-4400

TPV Display Technology (Xiamen) Co., Ltd., No. 1, Xianghai Road (Xiang'An) Industrial Zone Torch Hi-New Zon

Xiamen, Fujian, 361101

China

Tel: 86-5923686666

Trend Smart America, Ltd., 2 South Pointe

Drive Suite 152

Lake Forest, California 92630

Tel: (949) 540-0385

Trend Smart Ce México, S.r.l. de C.V., Sor Juana Ines De La Cruz No. 196202 Tijuana, Baja California, 22435 Mexico

Tel: 52-6646070688

Vizio, Inc. 39 Tesla Irvine, California 92618 Tel: (877) 698-4746

Yamaha Corporation 10-1, Nakazawa-cho Naka-ku, Hamamatsu Shizuoka 430-8650 Japan

Tel: 81-53-460-2800

Yamaha Corporation of America 6600 Orangethorpe Avenue Buena Park, California 90620 Tel: (714) 522-9011

Lenovo Group Ltd. No. 6 Chuangye Road Shangdi Information Industry Base Haidian District Beijing, 100085 China

Tel: 86-10-58868888

Lenovo (United States) Inc. 1009 Think Place Morrisville, North Carolina 27560 Tel: (866) 968-4465

Best Buy Co., Inc.

7601 Penn Avenue South Richfield, Minnesota 55423 Tel: (612) 291-1000

Newegg Inc. 16839 East Gale Avenue City Of Industry, California 91745 Tel: (800) 390-1119

Buy.com Inc. d/b/a Rakuten.com Shopping 85 Enterprise Suite 100 Aliso Viejo, California 92656 Tel: (949) 448-5400

Walmart Stores, Inc. 702 S.W. 8th Street Bentonville, Arkansas 72716 Tel: (479) 273-4000

Amazon.com, Inc. 410 Terry Avenue North Seattle, Washington 98109 Tel: (206) 622-2335

B & H Foto & Electronics Corp. 420 Ninth Avenue New York, New York 10001 Tel: (212) 239-7500

Costco Wholesale Corporation 999 Lake Drive Issaquah, Washington 98027 Tel: (425) 313-8100

TABLE OF CONTENTS

T			
ν	0	a	4
	a	2	۹

I.	INTR	RODUC	CTION	1
II.	THE	PARTI	IES	4
	A.	Com	plainant	4
	В.	Prop	osed Respondents	5
III.	THE	TECH	NOLOGY AND PRODUCTS AT ISSUE	12
	A.	The	Technology	12
	В.	The	Accused Products	13
IV.	THE	PATE	NTS AT ISSUE	14
	A.	The	Torres Patent (U.S. Patent No. 5,962,926)	14
		1.	Identification of the Patent and Ownership by Complainant	14
		2.	Non-Technical Description of the Torres Patent	15
		3.	Foreign Counterparts to the Torres Patent	16
	В.	The l	Hunter Patent (U.S. Patent No. 7,158,432)	16
		1.	Identification of the Patent and Ownership by Complainant	16
		2:	Non-Technical Description of the Hunter Patent	17
		3.	Foreign Counterparts to the Hunter Patent	18
	C.	The l	Rachedine Patent (U.S. Patent No. 7,230,505)	18
		1.	Identification of the Patent and Ownership by Complainant	18
		2.	Non-Technical Description of the Rachedine Patent	19
		3.	Foreign Counterparts to the Rachedine Patent	19
	D.	The S	Starnes Patent (U.S. Patent No. 7,518,947)	20
		1.	Identification of the Patent and Ownership by Complainant	20
		2.	Non-Technical Description of the Starnes Patent	20
		3.	Foreign Counterparts to the Starnes Patent	21
	E.	The I	Hess Patent (U.S. Patent No. 7,626,276)	21
		1.	Identification of the Patent and Ownership by Complainant	21
		2.	Non-Technical Description of the Hess Patent	22
		3.	Foreign Counterparts to the Hess Patent	23
	F.	The J	Jetton Patent (U.S. Patent No. 7,746,716)	23

TABLE OF CONTENTS

(continued)

				Page
		1.	Identification of the Patent and Ownership by Complainant	23
		2.	Non-Technical Description of the Jetton Patent	24
		3.	Foreign Counterparts to the Jetton Patent	24
	G.	Licen	sees Under the Asserted Patents	24
V.	SPEC	IFIC IN	ISTANCES OF IMPORTATION AND SALE	25
VI.			L AND UNFAIR ACTS COMMITTED BY PROPOSED NTS—PATENT INFRINGEMENT	29
	A.	The T	Forres Patent	33
	B.	The H	Iunter Patent	35
	C.,	The R	achedine Patent	37
	D.	The S	tarnes Patent	38
	E.	The H	Iess Patent	40
	F.	The Jo	etton Patent	42
VII.	THE I	DOMES	STIC INDUSTRY	44
	Α.		lainant's Substantial Exploitation of the Asserted Patents in the d States	44
		1.	Past Research and Development	44
		2.	Current Engineering, Research, and Development	45
	В.		cale's Practice of the Asserted Patents and Related Significant tements in the United States	45
VIII.	HARN	MONIZ	ED TARIFF SCHEDULE INFORMATION	49
IX.	RELA	TED L	ITIGATION	49
X.	RELII	EF REC	QUESTED	49

APPENDICES

Appendix No.	Description	Designation
A	Certified Copies of Asserted Patents	Public
	Ex. 1 – U.S. Patent No. 5,962,926 (Torres) Ex. 2 – U.S. Patent No. 7,158,432 (Hunter) Ex. 3 – U.S. Patent No. 7,230,505 (Rachedine) Ex. 4 – U.S. Patent No. 7,518,947 (Starnes) Ex. 5 – U.S. Patent No. 7,626,276 (Hess) Ex. 6 – U.S. Patent No. 7,746,716 (Jetton)	
В	Certified Copy of Prosecution History for U.S. Pat. No. 5,962,926 (Torres)	Public
С	Cited References for U.S. Pat. No. 5,962,926 (Torres)	Public
D	Certified Copy of Prosecution History for U.S. Pat. No. 7,158,432 (Hunter)	Public
Е	Cited References for U.S. Pat. No. 7,158,432 (Hunter)	Public
F	Certified Copy of Prosecution History for U.S. Pat. No. 7,230,505 (Rachedine)	Public
G	Cited References for U.S. Pat. No. 7,230,505 (Rachedine)	Public
Н	Certified Copy of Prosecution History for U.S. Pat. No. 7,518,947 (Starnes)	Public
I	Cited References for U.S. Pat. No. 7,518,947 (Starnes)	Public
J	Certified Copy of Prosecution History for U.S. Pat. No. 7,626,276 (Hess)	Public
K	Cited References for U.S. Pat. No. 7,626,276 (Hess)	Public
L	Certified Copy of Prosecution History for U.S. Pat. No. 7,746,716 (Jetton)	Public
M	Cited References for U.S. Pat. No. 7,746,716 (Jetton)	Public

N	Certified Copies of Assignment Records of the Asserted Patents	Public
	Ex. 1 - Frame/Reel 8742-0275	
	Ex. 2 - Frame/Reel 015698-0657	
	Ex. 3 - Frame/Reel 016162-0781	
	Ex. 4 - Frame/Reel 016453-0807	JAS
	Ex. 5 - Frame/Reel 016943-0229	
-	Ex. 6 - Frame/Reel 018319-0219	
	Ex. 7 - Frame/Reel 018855-0129	
	Ex. 8 - Frame/Reel 018921-0663	
**	Ex. 9 - Frame/Reel 019847-0804	
	Ex. 10 - Frame/Reel 020045-0448	8
50	Ex. 11 - Frame/Reel 023273-0099	ų
	Ex. 12 - Frame/Reel 024079-0082	
	Ex. 13 - Frame/Reel 024085-0001	74.5 26
	Ex. 14 - Frame/Reel 024397-0001	eo at
	Ex. 15 - Frame/Reel 030633-0424	
.*	Ex. 16 - Frame/Reel 031591-0266	
О	Foreign Counterparts to Asserted Patents	Public
	Ex. 1 – Foreign Counterparts to Torres '926	:
	Ex. 2 – Foreign Counterparts to Hunter '432	
	Ex. 3 – Foreign Counterparts to Rachedine '505	ie.
	Ex. 4 – Foreign Counterparts to Starnes '947	
	Ex. 5 – Foreign Counterparts to Hess '276	
	Ex. 6 – Foreign Counterparts to Jetton '716	
P	Freescale Licensees	Confidential
Q	Proof of Importation	Public
	Ex. 1 – Acer Iconia A1-810-L416 Tablet (Amazon)	
	Ex. 2 – ASUS MeMOPad HD7 ME173X (Newegg)	
	Ex. 3 – BLU Dash 4.5 (Amazon)	ų s
	Ex. 4 – Sharp LC-40LE835U (Best Buy)	, , , , , , , , , , , , , , , , , , ,
	Ex. 5 – Sharp LC-60LE650U (Best Buy)	2
	Ex. 6 – Zepol Report for Toshiba BDX3400	
	Ex. 7 - Zepol Report for Yamaha BD-A1020	
	Ex. 8 - Lenovo IdeaTab S6000 (Best Buy)	
	Ex. 9 – Vizio E470i-A0 LED HDTV (AmTRAN)	-
	Ex. 10 – Vizio E E500i-A1 Series LED TV (Walmart)	
	Ex. 11 - Vizio M3D460SR (TV) (Walmart)	

R	Claim Analysis Against Accused Products	Confidential
	Ex. 1 – Torres against MT5395	
	Ex. 2 – Torres against MT5396	
	Ex. 3 – Torres against MT5580	
	Ex. 4 – Torres against MT8551	
23	Ex. 5 – Torres against MT8555	
	Ex. 6 – Hunter against MT5396	,
	Ex. 7 – Hunter against MT5580	
	Ex. 8 – Hunter against MT6628	
	Ex. 9 – Hunter against MT6589	
	Ex. 10 – Hunter against MT8125	
	Ex. 11 – Hunter against MT8555	
	Ex. 12 – Rachedine against MT5395	
	Ex. 13 – Rachedine against MT6628	
	Ex. 14 – Starnes against MT5396	
	Ex. 15 – Starnes against MT5580	
	Ex. 16 – Starnes against MT6589	
	Ex. 17 – Starnes against MT6628	ž
	Ex. 18 – Starnes against MT8125	9
	Ex. 19 – Starnes against MT8551	
1	Ex. 20 – Starnes against MT8555	
	Ex. 21 – Hess against MT5395	
	Ex. 22 – Hess against MT5396	10)
,	Ex. 23 – Hess against MT8551	
	Ex. 24 – Jetton against MT5396	
	Ex. 25 – Jetton against MT5580	
8	Ex. 26 – Jetton against MT6589	e e
	Ex. 27 – Jetton against MT6628	
	Ex. 28 – Jetton against MT8125	
	Ex. 29 – Jetton against MT8551	.5
	Ex. 30 – Jetton against MT8555	

S	Company Information	Public
	Ex. 1 – Freescale Semiconductor, Inc.	,
	Ex. 2 – MediaTek, Inc. and MediaTek USA Inc.	
	Ex. 3 – Acer, Inc.	
9	Ex. 4 – AmTRAN Technology Co. Ltd. and AmTRAN	
	Logictics, Inc.	
	Ex. 5 – ASUSTek Computer Inc.	
	Ex. 6 – ASUS Computer International, Inc.	9
	Ex. 7 – BLU Products, Inc.	*
*	Ex. 8 – Sharp Corp.	
	Ex. 9 – Sharp Electronics Corp.	
	Ex. 10 – Sharp Electronics Mfg. Co. of America, Inc.	,
	Ex. 11 - Toshiba America Information Systems, Inc.	
	Ex. 12 - Toshiba Logistics America, Inc.	
	Ex. 13 - TPV Display Technology (Xiamen) Co., Ltd.	
	Ex. 14 - Trend Smart America, Ltd	
	Ex. 15 – Trend Smart America, Ltd (Importer)	
	Ex. 16 – Vizio, Inc.	
	Ex. 17 – Yamaha Corporation (Japan)	
	Ex. 18 – Yamaha Corporation of America	
	Ex. 19 – Lenovo Group Ltd.	
	Ex. 20 – Lenovo (United States) Inc.	
	Ex. 21 – Best Buy Co.	
	Ex. 22 – Newegg Inc.	
	Ex. 23 – Buy.com Inc.	
	Ex. 24 – Walmart Stores, Inc.	
	Ex. 25 – Amazon.com, Inc.	
	Ex. 26 – B&H Foto & Electronics Corp.	×
	Ex. 27 – Costco Wholesale Corporation	
T	Domestic Industry Claim Analysis	Confidential
	Ex. 1 – Torres '926	
	Ex. 2 – Hunter '432	
	Ex. 3 – Rachedine '505	
1	Ex. 4 – Starnes '947	Э 3
	Ex. 5 – Hess '276	
	Ex. 6 – Jetton '716	,

U	Domestic Industry Economic Records	Confidential
	Ex. 1 – P10XX/P20XX Sales Ex. 2 – P10XX Salary/Overhead Ex. 3 – P10XX Research and Development Ex. 4 – P10XX Manufacturing Costs	
	Ex. 5 – C90/C55 Sales	
	Ex. 6 – FGDS 2013	2
	Ex. 7 – FGDS 2014	57 046
	Ex. 8 – FGDS/Mask Correspondence	
	Ex. 9a – C90TFS Program Investment Ex. 9b – C55FG Product Investment	*
	Ex. 96 – C33FG Floddet Investment Ex. 9c – C90 C55 Technology Integration Investment	
	Ex. 9d – C90TFS and C55FG Design Investment	1 0 4
	Ex. 9e – C90TFS C55FG IP Design Investment	. 8
	Ex. 10 – PQ38 Sales	e
,	Ex. 11 – PQ38 NPI Summary	, a
	Ex. 12 – PQ38 Manufacturing Costs	
	Ex. 13 – Mohave Sales Ex. 14a – Mohave Salary and Overhead	
	Ex. 14b – C90 NPI Investment	
2	Ex. 14c – C90 NVM R&D Investment	8
	Ex. 15 - Mask to Project	5. 2
V	Reverse Engineering Reports	Confidential
	Ex. 1 – MT5395EUFJ, MT5395SGXJ	1
	Ex. 2 – MT5395TCNJ	
	Ex. 3 – MT5396SGDJ	a - .,
	Ex. 4 – MT5580JUFI, MT5580KUFI	
	Ex. 5 – MT6589WK, MT6589WMK, MT8125K	. 4
	Ex. 6 – MT6628QP Ex. 7 – MT8551DAAG	
	Ex. 7 – M18551DAAG Ex. 8 – MT8555DCBG, MT8555DBBG, MT8555DHCG	
	LA. 0 11110333DCDG, 11110333DDDG, 11110333DTICG	

I. <u>INTRODUCTION</u>

- 1. Freescale Semiconductor, Inc. ("Freescale") respectfully files this Complaint pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, based upon the unlawful and unauthorized importation into the United States, the sale for importation, or the sale within the United States after importation, of integrated circuits and products containing the same used in a variety of consumer applications (collectively, the "Accused Products"), including, without limitation, certain wireless communication devices, wireless phones, televisions, optical disc players, tablets, and the like. The Accused Products infringe one or more claims of U.S. Patent Nos. 5,962,926 ("Torres Patent"); 7,158,432 ("Hunter Patent"); 7,230,505 ("Rachedine Patent"); 7,518,947 ("Starnes Patent"); 7,626,276 ("Hess Patent"); and 7,746,716 ("Jetton Patent") (collectively, "the Asserted Patents").
- 2. Freescale is a leading designer and developer of complex, high-performance integrated circuit products. It has invested heavily in protection of its intellectual property and currently holds approximately five thousand active patents in the United States. This patent portfolio resulted from millions of dollars invested in research and development by Freescale and companies that form part of the lineage of Freescale, including Motorola, Inc.
- 3. The Asserted Patents involve valuable technology in the field of integrated circuit design, in particular, timing circuits associated with memory architectures and structures for bond pad layout. Freescale owns by assignment the Asserted Patents, which are valid and enforceable United States patents.
- 4. Freescale has invested considerable resources into the development of a domestic industry with respect to articles protected by the Asserted Patents and that exploits the Asserted Patents. Freescale is headquartered in the United States and has heavily invested in design centers in the United States for its integrated circuit products, including those incorporating the inventions claimed in the Asserted Patents. Those design centers are located in and around Austin, Texas, and Phoenix, Arizona.

- 5. Proposed Respondents ("Respondents") are MediaTek Inc. and MediaTek USA Inc. (collectively, "MediaTek"); Acer Inc., AmTRAN Technology Co. Ltd. and AmTRAN Logistics, Inc. (collectively "AmTRAN"); ASUSTek Computer Inc. and ASUS Computer International, Inc. (collectively, "ASUSTek"); BLU Products, Inc. ("BLU"); Sharp Corporation, Sharp Electronics Corporation ("SEC"), and Sharp Electronics Manufacturing Company of America Inc. ("SEMC") (collectively, "Sharp"); Toshiba America Information Systems, Inc. and Toshiba Logistics America, Inc. (collectively, "Toshiba"); TPV Display Technology (Xiamen) Co., Ltd. ("TPV Display"); Trend Smart America, Ltd. and Trend Smart Ce México, S.r.l. de C.V. (collectively "Trend Smart"); Vizio, Inc. ("Vizio"); Best Buy Co., Inc. ("Best Buy"); Walmart Stores, Inc.; Amazon.com, Inc.; Lenovo Group Ltd. and Lenovo (United States) Inc. (collectively, "Lenovo"); Yamaha Corporation (Japan) and Yamaha Corporation of America (collectively, "Yamaha"); Newegg Inc. ("Newegg"); B & H Foto & Electronics Corp. ("B&H"); Costco Wholesale Corporation ("Costco"); and Buy.com Inc. (d/b/a Rakuten.com Shopping).
- 6. Respondents infringe, literally or under the doctrine of equivalents, one or more claims of the Asserted Patents identified below and as further detailed herein. The asserted claims include:

U.S. Patent No.	Asserted Claims ¹
5,962,926 (Torres)	1*, 7, 11*, 16*
7,158,432 (Hunter)	1*, 4, 5
7,230,505 (Rachedine)	1*, 2
7,518,947 (Starnes)	1*, 2, 17*, 18
7,626,276 (Hess)	1*, 2, 5*, 8, 9, 16, 17
7,746,716 (Jetton)	1*, 5-8

7. Respondents' activities with respect to the importation into the United States, the sale for importation into the United States, and/or the sale within the United States after importation of the Accused Products, as defined in paragraph 1 above and as described more

¹ Independent claims are denoted by *.

fully below, are unlawful under 19 U.S.C. § 1337(a)(1)(B)(i), in that they constitute the infringement of one or more valid and enforceable claims of the Asserted Patents.

- 8. A domestic industry as required by 19 U.S.C. §§ 1337(a)(2) and (3) exists in the United States relating to articles protected by the Asserted Patents based on Freescale's significant investment in plant and equipment, significant employment of labor and capital, and substantial investment in the exploitation of articles protected by the Asserted Patents, including engineering and research and development.
- 9. Freescale seeks relief from the Commission in the form of a general or, alternatively, limited exclusion order excluding certain integrated circuits and products containing the same that infringe one or more claims of the Asserted Patents and which are manufactured, sold, and/or imported by or on behalf of, any Respondents, or any of their affiliated companies, parents, subsidiaries, or other related business entities, or their successors or assigns, from entry for consumption into the United States, entry for consumption from a foreign trade-zone, or withdrawal from a warehouse for consumption, for the remaining terms of the Asserted Patents, except under license of Freescale or as provided by law. Freescale maintains that products incorporating infringing integrated circuits are widely dispersed and constitute a pattern of violations of 19 U.S.C. § 1337 and the source of those products is difficult to ascertain such that a grant of a general exclusion order is warranted.
- 10. Freescale further seeks as relief cease and desist orders that prohibit Respondents and any of their principals, stockholders, officers, directors, employees, agents, licensees, distributors, controlled (whether by stock ownership or otherwise) or majority-owned business entities, successors, and assigns, from either directly engaging in, for, with, or otherwise on behalf of Respondents, (A) importing or selling for importation into the United States integrated circuits and products containing the same that infringe one or more claims of the Asserted Patents; (B) marketing, distributing, offering for sale, selling, or otherwise transferring in the United States imported integrated circuits and products containing the same that infringe one or more claims of the Asserted Patents; (C) advertising imported integrated circuits and products

containing the same that infringe one or more claims of the Asserted Patents in the United States; (D) soliciting U.S. agents or distributors for imported integrated circuits and products containing the same that infringe one or more claims of the Asserted Patents; and (E) aiding or abetting other entities in the importation, sale for importation, sale after importation, transfer, or distribution of integrated circuits and products containing the same that infringe one or more claims of the Asserted Patents.

11. Freescale further seeks any other relief the Commission is authorized to grant and deems appropriate.

II. THE PARTIES

A. Complainant

- 12. Freescale is a Delaware corporation with its headquarters located at 6501 William Cannon Drive West in Austin, Texas. Freescale was formed in 2004 as a result of the divestiture of the Semiconductor Products Sector of Motorola, Inc. Freescale is the successor-in-interest and assignee of Motorola's semiconductor-related patent portfolio. As a result of Freescale's and its predecessor's vigorous investment in research and development, it owns a portfolio of United States patents consisting of approximately 5,000 patents.
- 13. Freescale employs approximately 19,000 people in over 20 countries, including about 6,000 people in the United States alone. Freescale maintains major design, research and development, and support centers in Austin, Texas, and Phoenix, Arizona. Freescale also operates numerous wafer fabrication facilities around the world, including two facilities in Austin, Texas, and one facility in Chandler, Arizona.
- 14. Freescale enjoyed 2013 revenues of approximately \$4.19 billion, of which \$755 million was invested in research and development. *See* Appx. S, Ex. 1 at 6 (Freescale Semiconductor Announces Fourth Quarter and Full-Year 2013 Results).
- Freescale's customers include some of the world's top Original Equipment
 Manufacturers. Freescale's power management solutions, microprocessors, microcontrollers,

sensors, radio frequency semiconductors, analog and mixed signal circuits, and software are embedded in products used around the world including automobiles, communication and entertainment systems, home and commercial appliances, and networking infrastructures. Freescale's advanced technology and broad employment base make it an important component of the domestic economy in the technology sector.

B. Proposed Respondents

- 16. On information and belief, MediaTek Inc. is a corporation organized under the laws of Taiwan headquartered at No. 1, Dusing Road 1, Hsinchu Science Park, Hsinchu City 30078, Taiwan. Appx. S, Ex. 2 at 2 (MediaTek Annual Report 2012). On information and belief, MediaTek Inc. is the worldwide parent corporation for other MediaTek entities, and is responsible, directly and/or indirectly, for at least MediaTek's infringing activities and products. Appx. S, Ex. 2 at 80-81, Section 8.1.2. ("MediaTek Affiliated Companies Chart"). On information and belief, MediaTek Inc. is responsible for unfair acts committed by, directly and/or indirectly, designing, manufacturing, selling for importation, importing, and/or selling after importation communication, multimedia, and various other types of integrated circuits incorporating the asserted claims of the Asserted Patents ("MediaTek Integrated Circuits"). These integrated circuits are used in a wide variety of consumer applications, including mobile communication chipsets, Blu-ray player chipsets, and highly integrated digital TV controller chips. Appx. S, Ex. 2 at 43 (MediaTek Annual Report 2012).
- On information and belief, MediaTek USA Inc. ("MediaTek USA") is a corporation organized in the United States under the laws of Delaware headquartered at 2860 Junction Avenue, San Jose, California 95134. On information and belief, MediaTek USA is a wholly owned subsidiary of MediaTek Inc. and is engaged in sales, research, and development. Appx. S, Ex. 2 at 80, § 8.1.2. ("MediaTek Affiliated Companies Chart," listing major business for MediaTek USA as "R&D"); *id.* at 85, § 8.1.6. (listing net sales and operational income for MediaTek USA); *id.* at 102 (listing MediaTek USA's "Main Business" as "Research"). On

information and belief, MediaTek USA is responsible for unfair acts committed by, directly and/or indirectly, designing, selling for importation, importing, and/or selling after importation MediaTek Integrated Circuits.

- 18. On information and belief, Acer Inc. is a corporation organized under the laws of Taiwan headquartered at 8F, 88 Sec. 1, Xintai 5th Road, Xizhi, New Taipei City 221, Taiwan Appx. S, Ex. 3 (2012 Acer Group Annual Report). On information and belief, Acer is responsible for unfair acts committed by, directly and/or indirectly, designing, manufacturing, selling for importation, importing, and/or selling after importation personal computers, communications and consumer electronics, tablets, and/or other electronic devices, incorporating the MediaTek Integrated Circuits.
- 19. On information and belief, AmTRAN Technology Co. Ltd. is a corporation organized under the laws of Taiwan headquartered at No. 268, Lien Chen Road, 17th Floor, Chung Ho City, New Taipei 11235, Taiwan. On information and belief, AmTRAN Logistics, Inc. is a corporation organized in the United States under the laws of California headquartered at 9351 Irvine Center Drive, Irvine, California 92618. Appx. S, Ex. 4 (Business Entity Detail record for AmTRAN Logistics, Inc., on file with the California Secretary of State). On information and belief, AmTRAN is responsible for unfair acts committed by, directly and/or indirectly, designing, manufacturing, selling for importation, importing, and/or selling after importation personal computers, communications and consumer electronics, tablets, and/or other electronic devices, under the Vizio name that incorporate the MediaTek Integrated Circuits.
- 20. On information and belief, ASUSTek Computer Inc. is a corporation organized under the laws of Taiwan headquartered at No.15, Li-Te Rd., Beitou, Taipei, Taiwan. Appx. S, Ex. 5 at 2 (ASUSTek Computer Inc. 2012 Annual Report). On information and belief, ASUSTek is responsible for unfair acts committed by, directly and/or indirectly, designing, manufacturing, selling for importation, importing, and/or selling after importation communications and consumer electronics, tablets, and/or other electronic devices, incorporating the MediaTek Integrated Circuits.

- On information and belief, ASUS Computer International, Inc. is a corporation organized in the United States under the laws of California headquartered at 800 Corporate Way, Fremont, California 94539. Appx. S, Ex. 6 (Business Entity Detail record for ASUS Computer Int'l, on file with the California Secretary of State). On information and belief, ASUS Computer International is a wholly owned subsidiary of ASUSTek Computer Inc. engaged in sales and repair service in North America for the products manufactured by ASUSTek Computer Inc. *See* Appx. S, Ex. 5 at 103 (ASUSTek Computer Inc. 2012 Annual Report, listing major business for ASUS Computer International, Inc. as "Sales and repair service center in North America"). ASUS Computer International is responsible for unfair acts committed by, directly and/or indirectly, designing, manufacturing, selling for importation, importing, and/or selling after importation communications and consumer electronics, tablets, and/or other electronic devices, incorporating the MediaTek Integrated Circuits.
- On information and belief, BLU Products, Inc. is a United States corporation organized under the laws of Delaware headquartered at 10814 NW 33rd St # 100, Doral, Florida 33172. Appx. S, Ex. 7 (BLU Products, Inc. record, on file with Delaware Department of State); see also http://www.bluproducts.com (last accessed March 16, 2014). On information and belief, BLU is responsible for unfair acts committed by, directly and/or indirectly, designing, manufacturing, selling for importation, importing, and/or selling after importation wireless phones incorporating the MediaTek Integrated Circuits.
- On information and belief, Sharp Corporation is a corporation organized under the laws of Japan headquartered at 22-22 Nagaike-cho, Abeno-ku, Osaka 545-8522, Japan. Appx. S, Ex. 8 at 70 (Sharp Annual Report 2013). On information and belief, Sharp Corporation is responsible for unfair acts committed by, directly and/or indirectly, designing, manufacturing, selling for importation, importing, and/or selling after importation televisions incorporating the MediaTek Integrated Circuits.
- 24. On information and belief, Sharp Electronics Corporation ("SEC") is a United States corporation organized under the laws of New York headquartered at 1 Sharp Plaza,

Mahwah, New Jersey 07495. Appx. S, Ex. 9 (Sharp Electronics Corporation record, on file with the New York Department of State). On information and belief, SEC is a wholly owned subsidiary of Sharp Corporation responsible for importation and sales of consumer electronics and is responsible for unfair acts committed by, directly and/or indirectly, designing, manufacturing, selling for importation, importing, and/or selling after importation televisions incorporating the MediaTek Integrated Circuits.

- 25. On information and belief, Sharp Electronics Manufacturing Company of America, Inc. ("SEMC") is a United States corporation organized under the laws of California headquartered at 1 Sharp Plaza, Mahwah, New Jersey 07495. Appx. S, Ex. 10 (Business Entity Detail record for Sharp Elec. Mfg. Co. of Am., on file with the California Secretary of State). On information and belief, SEMC is a wholly owned subsidiary of Sharp Corporation responsible for sales of consumer electronics and is responsible for unfair acts committed by, directly and/or indirectly, selling for importation, importing, and/or selling after importation televisions incorporating the MediaTek Integrated Circuits.
- On information and belief, Toshiba America Information Systems, Inc. is a United States corporation organized under the laws of California headquartered at 9740 Irvine Boulevard, Irvine, California 92618. Appx. S, Ex. 11 (Business Entity Detail for Toshiba America Information Systems, Inc., on file with the California Secretary of State). On information and belief, Toshiba America Information Systems is responsible for unfair acts committed by, directly and/or indirectly, designing, manufacturing, selling for importation, importing, and/or selling after importation televisions and Blu-ray disc players incorporating the MediaTek Integrated Circuits.
- 27. On information and belief, Toshiba Logistics America, Inc. is a United States corporation organized under the laws of California headquartered at 9740 Irvine Boulevard, Irvine, California 92618. Appx. S, Ex. 12 (Business Entity Detail for Toshiba Logistics America, Inc., on file with the California Secretary of State). On information and belief, Toshiba Logistics America is responsible for unfair acts committed by, directly and/or indirectly, selling

for importation, importing, and/or selling after importation televisions and Blu-ray disc players incorporating the MediaTek Integrated Circuits.

- On information and belief, TPV Display Technology (Xiamen) Co., Ltd. ("TPV Display") is a corporation organized under the laws of China headquartered at No. 1, Xianghai Road, (Xiang'An) Industrial Zone, Torch Hi-New Zon, Xiamen, Fujian, 361101, China. Appx. S, Ex. 13 (TPV Technology Limited Organization Chart). On information and belief, TPV Display Technology is responsible for unfair acts committed by, directly and/or indirectly, designing, manufacturing, selling for importation, importing, and/or selling after importation televisions under the Vizio name that incorporate the MediaTek Integrated Circuits.
- 29. On information and belief, Trend Smart America, Ltd. is a United States corporation organized under the laws of California headquartered at 2 South Pointe Drive, Suite 152, Lake Forest, California 92630. Appx. S, Ex. 14 (Business Entity Detail for Trend Smart America Ltd., on file with the California Secretary of State). On information and belief, Trend Smart Ce México, S.r.l. de C.V. is a corporation organized under the laws of Mexico headquartered at Sor Juana Ines De La Cruz No. 196202, Tijuana, Baja California, 22435, Mexico. Appx. S, Ex. 13 (TPV Technology Limited Organization Chart). On information and belief, Trend Smart is related to Respondent TPV Display and is TPV Display's importer of Vizio products. Appx. S, Ex. 13 (TPV Technology Limited Organization Chart); Appx. S, Ex. 15 (http://www.tradeinfosales.com/front/NorthAmerica_importer_1f27bea5a0d9f53a) (last visited May 10, 2014). On information and belief, Trend Smart is responsible for unfair acts committed by, directly and/or indirectly, selling for importation, importing, and/or selling after importation televisions under the Vizio name that incorporate the MediaTek Integrated Circuits.
- 30. On information and belief, Vizio, Inc. is a United States corporation organized under the laws of California headquartered at 39 Tesla, Irvine, California 92618. Appx. S, Ex.16 (Business Entity Detail for Vizio, Inc., on file with the California Secretary of State). On information and belief, Vizio is responsible for unfair acts committed by, directly and/or

indirectly, selling for importation, importing, and/or selling after importation televisions incorporating the MediaTek Integrated Circuits.

- 31. On information and belief, Yamaha Corporation (Japan) is a corporation organized under the laws of Japan headquartered at 10-1, Nakazawa-cho, Naka-ku, Hamamatsu, Shizuoka 430-8650, Japan. Appx. S, Ex. 17 at 42 (Yamaha 2013 Annual Report). On information and belief, Yamaha Corporation of America is a consolidated subsidiary of Yamaha Corporation (Japan) (*id.* at 32, 40) located in the United States at 6600 Orangethorpe Avenue, Buena Park, California 90620. *See* Appx. S, Ex. 18 (Business Entity Detail record for Yamaha Corporation of America, on file with the California Secretary of State). On information and belief, Yamaha Corporation (Japan) and Yamaha Corporation of America (collectively, "Yamaha") are responsible for unfair acts committed by, directly and/or indirectly, selling for importation, importing, and/or selling after importation televisions and Blu-ray disc players incorporating the MediaTek Integrated Circuits.
- 32. On information and belief, Lenovo Group Ltd. is a corporation organized under the laws of China headquartered at No. 6 Chuangye Road, Shangdi Information Industry Base, Haidian District, Beijing, China 100085. Appx. S, Ex. 19 (2012/13 Annual Report Lenovo Group Limited). On information and belief, Lenovo (United States) Inc. is a United States corporation organized under the laws of Delaware headquartered at 1009 Think Place, Morrisville, North Carolina 27560. Appx. S., Ex. 20 (Business Entity Detail for Lenovo (United States) Inc., on file with the North Carolina Secretary of State). On information and belief, Lenovo Group Ltd. and Lenovo (United States) Inc. (collectively, "Lenovo") are responsible for unfair acts committed by, directly and/or indirectly, selling for importation, importing, and/or selling after importation tablet computers incorporating the MediaTek Integrated Circuits.
- 33. On information and belief, Best Buy Co., Inc. is a United States corporation organized under the laws of Minnesota headquartered at 7601 Penn Avenue, South Richfield, Minnesota 55423. Appx. S, Ex. 21 (Business Entity Detail for Best Buy Co., Inc., on file with the Minnesota Secretary of State). On information and belief, Best Buy Co. is responsible for

unfair acts committed by, directly and/or indirectly, selling for importation, importing, and/or selling after importation televisions, wireless phones, Blu-ray disc players, and tablet computers incorporating the MediaTek Integrated Circuits.

- 34. On information and belief, Newegg Inc. is a United States corporation organized under the laws of Delaware headquartered at 16839 East Gale Avenue, City Of Industry, California 91745. Appx. S, Ex. 22 (Business Entity Detail record for Newegg Inc., on file with the California Secretary of State). On information and belief, Newegg Inc. is responsible for unfair acts committed by, directly and/or indirectly, selling for importation, importing, and/or selling after importation televisions, wireless phones, Blu-ray disc players, and tablet computers incorporating the MediaTek Integrated Circuits.
- 35. On information and belief, Buy.com Inc., doing business as Rakuten.com Shopping, is a United States corporation organized under the laws of Delaware headquartered at 85 Enterprise, Suite 100, Aliso Viejo, California 92656. Appx. S, Ex. 23 (Business Entity Detail record for Buy.com Inc., on file with the California Secretary of State). On information and belief, Buy.com Inc. is responsible for unfair acts committed by, directly and/or indirectly, selling for importation, importing, and/or selling after importation televisions, wireless phones, Blu-ray disc players, and tablet computers incorporating the MediaTek Integrated Circuits.
- 36. On information and belief, Walmart Stores, Inc. is a United States corporation organized under the laws of Delaware headquartered at 702 S.W. 8th Street, Bentonville, Arkansas 72716. Appx. S, Ex. 24 (Business Entity Detail record for Walmart Stores, Inc., on file with the Arkansas Secretary of State). On information and belief, Walmart Stores, Inc. is responsible for unfair acts committed by, directly and/or indirectly, selling for importation, importing, and/or selling after importation televisions, wireless phones, Blu-ray disc players, and tablet computers incorporating the MediaTek Integrated Circuits.
- 37. On information and belief, Amazon.com, Inc. is a United States corporation organized under the laws of Delaware headquartered at 410 Terry Avenue North, Seattle, Washington 98109. Appx. S, Ex. 25 (Business Entity Detail for Amazon.com, Inc., on file with

the Washington Secretary of State). On information and belief, Amazon.com, Inc. is responsible for unfair acts committed by, directly and/or indirectly, selling for importation, importing, and/or selling after importation televisions, wireless phones, Blu-ray disc players, and tablet computers incorporating the MediaTek Integrated Circuits.

- 38. On information and belief, B&H is a United States corporation organized under the laws of New York headquartered at 420 Ninth Avenue, New York, New York 10001. Appx. S., Ex. 26 (Business Entity Detail for B & H Foto & Electronics Corp., on file with the New York Secretary of State). On information and belief, B & H is responsible for unfair acts committed by, directly and/or indirectly, selling for importation, importing, and/or selling after importation televisions, wireless phones, Blu-ray disc players, and tablet computers incorporating the MediaTek Integrated Circuits.
- 39. On information and belief, Costco Wholesale Corporation is a United States corporation organized under the laws of Washington headquarted at 999 Lake Drive, Issaquah, Washington, 98027. Appx. S., Ex. 27 (Business Entity Detail for Costco Wholesale, on file with the Washington Secretary of State). On information and belief, Costco is responsible for unfair acts committed by, directly and/or indirectly, selling for importation, importing, and/or selling after importation televisions, wireless phones, Blu-ray disc players, and tablet computers incorporating the MediaTek Integrated Circuits.

III. THE TECHNOLOGY AND PRODUCTS AT ISSUE

A. The Technology

40. The Asserted Patents generally relate to circuitry for timing operations within memory circuits and to bond pad structures and layouts used on integrated circuits. Integrated circuit memory requires precise and stable timing signals to ensure fast operation. These timing signals are generated by clock circuits and propagated by signal lines through the memory. The Asserted Patents include circuit technology for generating, controlling and using signals that synchronize the operation of a memory. The Asserted Patents also include circuit technology for

generating an oscillator signal stable over a wide frequency range which is useful in wireless communication applications. Finally, the Asserted Patents include technology for wirebond pads that increase input/output density of the chip layout. The technology of the Asserted Patents functions to provide highly advanced integrated circuits with faster memory and increased density of input/output connections.

B. The Accused Products

- 41. The Accused Products are generally integrated circuits, wireless communication devices, and audiovisual devices, such as televisions, Blu-ray disc players, computer tablets, optical disc readers, consumer electronics, and wireless phones, which incorporate the MediaTek Integrated Circuits. Each of the Asserted Patents is infringed, literally or under the doctrine of equivalents, by multiple interrelated MediaTek Integrated Circuits, as explained more fully below. The infringement of individual patents across a series of products indicates a pattern of violation of 19 U.S.C. § 1337. The MediaTek Integrated Circuits are also incorporated into a variety of different types of consumer electronics products (each of which has multiple competitors) which are dispersed throughout the consumer electronics market. Due to the different types of products and their dispersion throughout the market, it is difficult to identify the source of the infringing products. Nevertheless, while there may be other non-identified infringing products (some of which may be identified during discovery), a number of infringing products have been identified and grouped as follows:
- 42. The phrase "Accused MT5395 Products" refers to certain Accused Products containing a MediaTek MT5395 series system on a chip (SoC) processor. The MT5395 chip is typically employed to control televisions.
- 43. The phrase "Accused MT5396 Products" refers to certain Accused Products containing a MediaTek MT5396 series system on a chip (SoC) processor. The MT5396 chip is typically employed to control televisions.

- 44. The phrase "Accused MT5580 Products" refers to certain Accused Products containing a MediaTek MT5580 series system on a chip (SoC) processor. The MT5580 chip is typically employed to control televisions.
- 45. The phrase "Accused MT6589 Products" refers to certain Accused Products containing a MediaTek MT6589 series quad-core processor. The MT6589 chip is typically employed as the central processing unit in smartphone and/or wireless communication devices.
- 46. The phrase "Accused MT6628 Products" refers to certain Accused Products containing a MediaTek MT6628 series processor. The MT6628 chip is typically employed to control wireless connectivity in smartphones and/or wireless communication devices.
- 47. The phrase "Accused MT8125 Products" refers to certain Accused Products containing a MediaTek MT8125 series quad-core processor. The MT8125 chip is typically employed as the central processing unit in smartphone and/or wireless communication devices.
- 48. The phrase "Accused MT8551 Products" refers to certain Accused Products containing a MediaTek MT8551 series system on a chip (SoC) processor. The MT8551 is tailored to perform operations useful to Blu-ray playback, and as such is typically employed to control Blu-ray disc players.
- 49. The phrase "Accused MT8555 Products" refers to certain accused products containing a MediaTek MT8555 series system on a chip (SoC) processor. The MT8555 is tailored to perform operations useful to Blu-ray playback, and as such is typically employed to control Blu-ray disc players.

IV. THE PATENTS AT ISSUE

- A. The Torres Patent (U.S. Patent No. 5,962,926)
 - 1. Identification of the Patent and Ownership by Complainant
- 50. Freescale owns by assignment the entire right, title, and interest in the Torres Patent entitled "Semiconductor Device Having Multiple Overlapping Rows of Bond Pads with Conductive Interconnects and Method of Pad Placement," which issued on October 5, 1999.

Pursuant to Commission Rule 210.12(a)(9)(i), a certified copy of the Torres Patent is attached as Appendix A, Ex. 1. There are no related United States patents or applications.

- 51. The Torres Patent issued to inventors Victor Manuel Torres, Ashok Srikantappa, and Laxminarayan Sharma from United States Patent Application No. 08/940,605, which was filed on September 30, 1997. All inventors assigned title to the Torres Patent to Motorola, Inc., as reflected on the face of the Torres Patent. Motorola, Inc. in turn assigned its interest in the Torres Patent to Freescale, and that assignment was recorded in the United States Patent and Trademark Office on May 7, 2004. The Torres Patent expires on September 30, 2017. Pursuant to Commission Rule 210.12(a)(9)(ii), certified copies of the recorded assignments of the Torres Patent are attached as Appendix N, Exs. 1 (Reel 8742/Frame 0275), 2 (Reel 015698/Frame 0829), 7 (Reel 018855/Frames 0188, 0390), 14 (Reel 024397/Frames 0078, 0213), 15 (Reel 030633/Frames 0445, 0636), and 16 (Reel 031591/Frames 0284, 0467).
- 52. Pursuant to Commission Rule 210.12(c), a certified copy of the prosecution history of the Torres Patent, as well as each patent and applicable pages of each technical reference mentioned in the prosecution history, are attached as Appendices B and C, respectively. Three additional copies of the prosecution history and four copies of the technical references are also included.

2. Non-Technical Description of the Torres Patent

- 53. The Torres Patent has 16 claims. Freescale is asserting at least claims 1, 7, 11, and 16.
- 54. The Torres Patent discloses and claims a semiconductor device employing two or more rows of bond pads. Through the bond pads, the electrical components in a semiconductor chip are connected to other components through a larger substrate or circuit board. The number of bond pads is often a limiting factor in the size of the semiconductor chip. The Torres Patent seeks to optimize the configuration of bond pads by arranging the pads so as to limit the height and distribution of the wire connections between the electrical device on the substrate or circuit

board and the bond pads. The Torres arrangement of bond pads permits a higher density of connections between the semiconductor chip and the underlying substrate or circuit board. Such an arrangement permits the chip to use a smaller area on a printed circuit board ("PCB") in the end product and/or permits a slimmer vertical thickness of the end product.²

55. The Torres Patent accomplishes this by organizing rows of bond pads such that (1) in a first row of bond pads, a pad has two edges parallel to a corresponding side of the semiconductor device, and two edges perpendicular to the corresponding side of the semiconductor device; (2) in a second row of bond pads, a pad has two edges parallel to the same corresponding side of the semiconductor device, and two edges perpendicular to the corresponding side of the semiconductor device; and (3) one of the perpendicular edges of the bond pad in the second row is parallel to the perpendicular edge of the bond pad in the first row and also intersects one of the bond pads in the first row.

3. Foreign Counterparts to the Torres Patent

56. Freescale is the assignee of various filed foreign patents and patent applications that also claim priority to the Torres Patent or its predecessors, including TW411495 (B), KR100369913 (B1), JPH11195671 (A), JP3305664 (B2), and BR9803441 (A). The present status of these patents or applications is indicated in Appendix O, Ex. 1, and except as listed in that exhibit, there are no active corresponding foreign patents or patent applications.

B. The Hunter Patent (U.S. Patent No. 7,158,432)

1. Identification of the Patent and Ownership by Complainant

57. Freescale owns by assignment the entire right, title, and interest in the Hunter Patent entitled "Memory with Robust Data Sensing and Method for Sensing Data," which issued on January 2, 2007. Pursuant to Commission Rule 210.12(a)(9)(i), a certified copy of the Hunter

² No part of this Complaint, including any Appendix or Exhibit hereto, construes or is intended to construe the specification, file history, or claims of any Asserted Patent.

Patent is attached as Appendix A, Ex. 2. There are no related United States patents or patent applications.

- The Hunter Patent issued to inventors Bradford L. Hunter and Shayan Zhang from United States Patent Application No. 11/218,135, which was filed on September 1, 2005. The inventors assigned title to the Hunter Patent to Freescale, as reflected on the face of the Hunter Patent. The Hunter Patent expires on September 1, 2025. Pursuant to Commission Rule 210.12(a)(9)(ii), certified copies of the recorded assignments of the Hunter Patent are attached as Appendix N, Exs. 5 (Reel 016943/Frame 0229), 7 (Reel 018855/Frames 0269, 0485), 14 (Reel 024397/Frame 0261), 15 (Reel 030633/Frames 0484, 0687), and 16 (Reel 031591/Frames 0322, 0509).
- 59. Pursuant to Commission Rule 210.12(c), a certified copy of the prosecution history of the Hunter Patent, as well as each patent and applicable pages of each technical reference mentioned in the prosecution history, are attached as Appendices D and E, respectively. Three additional copies of the prosecution history and four copies of the technical references are also included.

2. Non-Technical Description of the Hunter Patent

- 60. The Hunter Patent has 20 claims. Freescale is asserting at least claims 1, 4, and 5.
- 61. The Hunter Patent discloses and claims a memory device using sense amplifiers with fast sense time and resistance to perturbations in the signal on the sense line (which occurs when differential sense amplifiers are precharged to a power supply voltage and the result is an inability to resolve the logic state in the memory cell). The Hunter memory has two sense amplifiers, each coupled to a local data line that has an output terminal for providing the logic state of a memory cell on the local data line. The Hunter memory also includes a logic gate for combining the signals from the local data lines. Finally, the Hunter memory circuit has a driver connected to the output terminal of the logic gate, and a control input terminal, and an output terminal connected to a global data line within the memory. The global data line outputs the data

from the sense amplifier. This structure helps to decrease memory access time, which permits processor chips to operate with faster clock cycles and permits end products using the processor chips to operate at faster data rates.

3. Foreign Counterparts to the Hunter Patent

62. Freescale is the assignee of various filed foreign patents and patent applications that also claim priority to the Hunter Patent or its predecessors, including WO2007027577 (A2), WO2007027577 (A3), TWI416534 (B), KR20080046639 (A), JP2009506478 (A), CN101253570 (A), and CN101253570 (B). The present status of these patents or applications is indicated in Appendix O, Ex. 2, and except as listed in that exhibit, there are no active corresponding foreign patents or patent applications.

C. The Rachedine Patent (U.S. Patent No. 7,230,505)

1. Identification of the Patent and Ownership by Complainant

- 63. Freescale owns by assignment the entire right, title, and interest in the Rachedine Patent entitled "Voltage Controlled Oscillator with Gain Control," which issued on June 12, 2007. Pursuant to Commission Rule 210.12(a)(9)(i), a certified copy of the Rachedine Patent is attached as Appendix A, Ex. 3. There are no related United States patents or patent applications.
- 64. The Rachedine Patent issued to inventors Mohammed Rachedine and Daniel L. Kaczman from United States Patent Application No. 11/098,110, which was filed on April 4, 2005. The inventors assigned title to the Rachedine Patent to Freescale, as reflected on the face of the Rachedine Patent. Under 35 U.S.C. § 154(b), the term of the Rachedine Patent is extended 114 days, and therefore the Rachedine Patent expires on July 27, 2025. Pursuant to Commission Rule 210.12(a)(9)(ii), certified copies of the recorded assignments of the Rachedine Patent are attached as Appendix N, Exs. 4 (Reel 016453/Frame 0807), 7 (Reel 018855/Frames 0264, 0479), 10 (Reel 020045/Frames 0453, 0463), 14 (Reel 024397/Frames 0132, 0265), 15 (Reel 030633/Frames 0488, 0691), and 16 (Reel 031591/Frames 0325, 0512).

65. Pursuant to Commission Rule 210.12(c), a certified copy of the prosecution history of the Rachedine Patent, as well as each patent and applicable pages of each technical reference mentioned in the prosecution history, are attached as Appendices F and G, respectively. Three additional copies of the prosecution history and four copies of the technical references are also included.

2. Non-Technical Description of the Rachedine Patent

- 66. The Rachedine Patent has 19 claims. Freescale is asserting at least claims 1 and 2.
- 67. The Rachedine Patent discloses and claims a voltage controlled oscillator with gain control to reduce variation in the Voltage Controlled Oscillator ("VCO") gain as a consequence of changing voltage inputs. An oscillator signal is generally used as a base from which to generate clocking or synchronization signals. The Rachedine VCO has an input voltage that controls the frequency of the oscillator output, and a control circuit to adjust the gain (generally the ratio of voltage in to frequency out) so as to keep the gain comparatively constant through the operative range of input voltages. The Rachedine VCO also includes a circuit to adjust the gain when the output frequency range is changed. Finally, the Rachedine VCO contains a circuit for use in a multi-band situation (such as cell phones that must operate over different carriers' different frequencies) to adjust the gain to be relatively constant within each frequency band. The stability of the VCO output frequency over a wide range of conditions facilitates faster data processing for video, wireless communication or other data intensive products.

3. Foreign Counterparts to the Rachedine Patent

68. There are no foreign patents that claim priority to the Rachedine Patent or its predecessors, nor are there any corresponding foreign patent applications. *See* Appx. O, Ex. 3.

D. The Starnes Patent (U.S. Patent No. 7,518,947)

1. Identification of the Patent and Ownership by Complainant

- 69. Freescale owns by assignment the entire right, title, and interest in the Starnes Patent entitled "Self-Timed Memory Having Common Timing Control Circuit and Method Therefor," which issued on April 14, 2009. Pursuant to Commission Rule 210.12(a)(9)(i), a certified copy of the Starnes Patent is attached as Appendix A, Ex. 4. There are no related United States patents or applications.
- The Starnes Patent issued to inventor Glenn E. Starnes from United States Patent Application No. 11/536,136, which was filed on September 28, 2006. The inventor assigned title to the Starnes Patent to Freescale, as reflected on the face of the Starnes Patent. Under 35 U.S.C. § 154(b), the term of the Starnes Patent is extended 224 days, and therefore the Starnes Patent expires on May 10, 2027. Pursuant to Commission Rule 210.12(a)(9)(ii), certified copies of the recorded assignments of the Starnes Patent are attached as Appendix N, Exs. 6 (Reel 018319/Frame 0219), 7 (Reel 018855/Frames 0285, 0502), 11 (Reel 023273/Frames 0099, 0112), 14 (Reel 024397/Frames 0149, 0279), 15 (Reel 030633/Frames 0503, 0711), and 16 (Reel 031591/Frames 0340, 0528).
- 71. Pursuant to Commission Rule 210.12(c), a certified copy of the prosecution history of the Starnes Patent, as well as each patent and applicable pages of each technical reference mentioned in the prosecution history, are attached as Appendices H and I, respectively. Three additional copies of the prosecution history and four copies of the technical references are also included.

2. Non-Technical Description of the Starnes Patent

- 72. The Starnes Patent has 19 claims. Freescale is asserting at least claims 1, 2, 17, and 18.
- 73. The Starnes Patent discloses and claims a self-timed memory using a set of local clock driver circuits inside the memory itself for providing timing functions rather than reliance

upon an external clock to synchronize internal memory operation. The memory includes a timing control circuit coupled to the clock driver circuits. The timing control circuit includes a latch to store the current state of the local clock drivers. The purpose of this timing control circuit is to eliminate the need to use complex logic gates along the clock circuits' critical data paths, allowing better critical timing performance of the circuits. The timing circuit also contains a recovery latch to improve clock recovery synchronization, reducing the risk of initializing the clock timing circuit in the wrong logic state. This structure helps decrease memory access time, which permits processor chips to operate with faster cycle times and permits end products using the processors to operate at higher data rates.

3. Foreign Counterparts to the Starnes Patent

74. There are no foreign patents that claim priority to the Starnes Patent or its predecessors, nor are there any corresponding foreign patent applications. *See* Appx. O, Ex. 4.

E. The Hess Patent (U.S. Patent No. 7,626,276)

1. Identification of the Patent and Ownership by Complainant

- 75. Freescale owns by assignment the entire right, title, and interest in the Hess Patent entitled "Method and Apparatus for Providing Structural Support for Interconnect Pad While Allowing Signal Conductance," which issued on December 1, 2009. Pursuant to Commission Rule 210.12(a)(9)(i), a certified copy of the Hess Patent is attached as Appendix A, Ex. 5.
- The Hess Patent issued to inventors Kevin J. Hess, Susan H. Downey, James W. Miller, and Cheng Choi Yong from United States Patent Application No. 11/750,048, which was filed on May 17, 2007. That application is a divisional of United States Patent Application No. 11/033,008, which was filed on January 11, 2005 and issued as U.S. Patent No. 7,241,636. The inventors assigned title to the Hess Patent to Freescale, as reflected on the face of the Hess Patent. Under 35 U.S.C. § 154(b), the term of the Hess Patent is extended 202 days, and therefore the Hess Patent expires on August 1, 2025. Pursuant to Commission Rule

210.12(a)(9)(ii), certified copies of the recorded assignments of the Hess Patent are attached as Appendix N, Exs. 3 (Reel 016162/Frame 0781), 10 (Reel 020045/Frames 0450, 0460), 12 (Reel 024079/Frames 0084, 0096), 14 (Reel 024397/Frames 0156, 0286), 15 (Reel 030633/Frames 0510, 0719), and 16 (Reel 031591/Frames 0346, 0535).

77. Pursuant to Commission Rule 210.12(c), a certified copy of the prosecution history of the Hess Patent, as well as each patent and applicable pages of each technical reference mentioned in the prosecution history, are attached as Appendices J and K, respectively. Three additional copies of the prosecution history and four copies of the technical references are also included.

2. Non-Technical Description of the Hess Patent

- 78. The Hess Patent has 19 claims. Freescale is asserting at least claims 1, 2, 5, 8, 9, 16, and 17.
- 79. In manufacturing a semiconductor die, wirebonding is used to connect the die's electrical circuit to a pin on a component package. The wire bond pad typically sits upon a stack of metal and dielectric layers, which provide mechanical support to the pad. However, the bond pad structure (*i.e.*, the bond pad and its metal and dielectric support layers) is subject to fracture due to the compressive forces created during wire bonding. In addition, a lifting force created by wire bonding may cause stress to the bond pad structure, resulting in delamination of the underlying layers.
- 80. In the Hess Patent, novel layering techniques are used in the metal/dielectric stack underlying the bond pad. The various metallic, or conductive, layers are formed with vertically aligned openings or slots, and the metallic layers do not have a continuous connection between all horizontal planes. This structure provides structural support to the bond pad, and also permits the metallic layers to be used for wiring or interconnects unrelated to the bond pad. By improving the bond pad structure, the die area can be reduced, and ultimately, the board space in the end product using the integrated circuit can be reduced.

3. Foreign Counterparts to the Hess Patent

81. Freescale is the assignee of various filed foreign patents and patent applications that also claim priority to the Hess Patent or its predecessors, including US7241636 (B2), WO2006076082 (A2), WO2006076082 (A3), US2007210442 (A1), TWI389226 (B), KR20070099599 (A), KR101203220 (B1), JP2008527710 (A), CN101556945 (A), CN101556945 (B), CN101167170 (A), and CN100561693 (C). The present status of these patents or applications is indicated in Appendix O, Ex. 5, and except as listed in that exhibit, there are no corresponding foreign patents or patent applications.

F. The Jetton Patent (U.S. Patent No. 7,746,716)

1. Identification of the Patent and Ownership by Complainant

- 82. Freescale owns by assignment the entire right, title, and interest in the Jetton Patent entitled "Memory Having a Dummy Bitline for Timing Control," which issued on June 29, 2010. Pursuant to Commission Rule 210.12(a)(9)(i), a certified copy of the Jetton Patent is attached as Appendix A, Ex. 6.
- R. Lu, and Glenn E. Starnes from United States Patent Application No. 11/677,808, which was filed on February 22, 2007. The inventors assigned title to the Jetton Patent to Freescale, as reflected on the face of the Jetton Patent. Under 35 U.S.C. § 154(b), the term of the Jetton Patent is extended 93 days, and therefore the Jetton Patent expires on May 26, 2027. Pursuant to Commission Rule 210.12(a)(9)(ii), certified copies of the recorded assignments of the Jetton Patent are attached as Appendix N, Exs. 8 (Reel 018921/Frame 0663), 9 (Reel 019847/Frames 0808, 0818), 13 (Reel 024085/Frames 0004, 0306), 14 (Reel 024397/Frames 0011, 0297), 15 (Reel 030633/Frames 0517, 0728), and 16 (Reel 031591/Frames 0353, 0543).
- 84. Pursuant to Commission Rule 210.12(c), a certified copy of the prosecution history of the Jetton Patent, as well as each patent and applicable pages of each technical reference mentioned in the prosecution history, are attached as Appendices L and M,

respectively. Three additional copies of the prosecution history and four copies of the technical references are also included.

2. Non-Technical Description of the Jetton Patent

- 85. The Jetton Patent has 20 claims. Freescale is asserting at least claims 1, 5, 6, 7, and 8.
- 86. The Jetton Patent discloses and claims a memory having a dummy bitline for timing control. A conventional memory is an array of cells that hold a bit of information ("bitcells"). This array has rows ("wordlines") and columns ("bitlines"), such that bitcells can be addressed using those rows and columns. In large, high speed memories, there may be a discernible timing lag as an addressing signal propagates through a wordline. If the memory attempts to read the bits in the addressed bitline before the addressing signal has propagated throughout the wordline, the memory may read the wrong bits, such as those from the previous memory operation. The Jetton memory uses a "dummy" bitline with one or more stacks of pull-down transistors to determine the proper time to enable the sense amplifiers and reliably read the data on the regular array bitlines. Because the dummy bitline improves the precision on memory access timing, end products incorporating this memory structure can operate at faster data rates.

3. Foreign Counterparts to the Jetton Patent

87. Freescale is the assignee of various filed foreign patents and patent applications that also claim priority to the Jetton Patent or its predecessors, including WO2008103516 (A1), KR20090115855 (A), JP2010519672 (A), CN101617369 (A), and CN101617369 (B). The present status of these patents or applications is indicated in Appendix O, Ex. 6, and except as listed in that exhibit, there are no corresponding foreign patents or patent applications.

G. Licensees Under the Asserted Patents

88. Pursuant to Commission Rule 210.12(a)(9)(iii), a list identifying each licensee specifically licensed under one or more of the Asserted Patents is attached as Confidential

Appendix P. The scope and duration of each license, and the rights associated with the license, are dependent on the specific terms of each agreement.

V. SPECIFIC INSTANCES OF IMPORTATION AND SALE

- 89. On information and belief, the Accused Products are manufactured outside the United States.
- 90. On information and belief, Respondents, directly or through agents acting on behalf of MediaTek or its customers, manufacture, import into the United States, sell for importation into the United States, and/or sell or offer for sale within the United States after importation the Accused Products. The specific instances of importation of the Accused Products set forth below are examples of the unlawful importation, sale for importation, and/or sale after importation of infringing articles.
- 91. Acer-brand computer tablets are an example of the Accused MT8125 Products.

 Appx Q, Ex. 1 (Acer A1-810-L416 Iconia A1 tablet). These devices are made in China. *Id.* at 4 ("Made in China"). They were imported into the United States. For example, a representative of Complainant purchased a unit of the Acer A1-810-L416 Iconia A1 tablet as depicted. *Id.* at 1-3 (Amazon receipt). Upon information and belief, this model is still available for sale online in the United States. *See* http://www.amazon.com/s/ref=nb_sb_noss/185-8931055-7290423?url=search-alias%3Daps&field-keywords=Acer+A1-810-L416+Iconia+A1+tablet (last visited May 9, 2014). The Iconia A1 tablets contain a MediaTek MT8125 chip. Appx. Q, Ex. 1 at 7 (photos of the Iconia A1 showing the MT8125 chip).
- 92. ASUS-brand computer tablets are an example of both the Accused MT6628
 Products and the Accused MT8125 Products. Appx. Q, Ex. 2 (ASUS MeMOPad HD7 Tablet (ME173X)). These devices are made in China. *Id.* at 4-5 ("Made in China"/"Fabriqué in Chine"). They were imported into the United States. For example, a representative of Complainant purchased a unit of the ME173X as depicted. *Id.* at 1-3 (Newegg.com receipt). Upon information and belief, this model is still available for sale online in the United States. *See*

http://www.amazon.com/MeMOPad-HD-7-Inch-Blue-ME173X-A1-BL/dp/B00E0EY7Z6 (last visited April 24, 2014). The ME173X tablets contain a MediaTek MT6628 chip. Appx. Q, Ex. 2 at 7-8 (photos of the ME173X main board showing the MT6628 chip). The ME173X tablets also contain a MediaTek MT8125 chip. *Id.* at 9-10 (photos of the ME173X main board showing the MT8125 chip).

- 93. As another example, BLU Products-branded wireless phones are an example of the Accused MT6589 Products and the Accused MT6628 Products. Appx. Q, Ex. 3 (BLU Dash 4.5). These devices are made in China. *Id.* at 3 ("Assembled in China"). They were imported into the United States. For example, a representative of Complainant purchased a unit of the BLU Dash 4.5 as depicted. *Id.* at 1 (Amazon.com receipt, shipping address, "Austin, Texas"). Upon information and belief, this model is still available for sale online in the United States. *See* http://www.amazon.com/BLU-Unlocked-Quad-Core-Processor-4-5-inch/dp/B00DMI9N32/ref=sr_1_2 (last visited April 24, 2014). The Dash 4.5 smartphone contains a MediaTek MT6589 chip. Appx. Q, Ex. 3, at 4 (photo of Dash 4.5 main board showing MT6589 chip). The Dash 4.5 also contains a MediaTek MT6628 chip. *Id.* at 6 (photo of Dash 4.5 main board showing the MT6628 chip at center).
- 94. As another example, certain Sharp televisions are examples of the Accused MT5395 Products. Appx. Q, Ex. 4 at 1-2 (Sharp LC-40LE835U Purchase). Other Sharp televisions are examples of the Accused MT5396 Products. Appx. Q, Ex. 5 at 1 (Sharp LC-60LE650U Purchase). These devices are assembled in Mexico. Appx. Q, Ex. 4 at 5 (Sharp LC-40LE835U Proof of Importation "Assembled in Mexico"); Appx. Q, Ex. 5 at 4 (Sharp LC-60LE650U Proof of Importation "Made in Mexico"). They were then imported into the United States. For example, a representative of Complainant purchased one unit each of the LC-40LE835U and LC-60LE650U as depicted. Appx. Q, Ex. 4 at 1-2 (Best Buy receipt); Appx. Q, Ex. 5 at 1 (Best Buy receipt). The Sharp LC-60LE650U is still available for sale online in the United States. *See* http://www.amazon.com/Sharp-LC-60LE650-60-inch-Aquos-1080p/dp/B00BG5M93Y/ref=sr 1 1? (last visited April 24, 2014). The Sharp LC-40LE835U

contains a MediaTek MT5395 chip. Appx. Q, Ex. 4 at 7-8 (photos Sharp LC-40LE835U main board showing a MT5395 chip). The Sharp LC-60LE650U contains a MediaTek MT5396 chip. Appx. Q, Ex. 5 at 5-6 (photos of the LC-60LE650U main board showing the MT5396 chip).

- Accused MT8551 Products. Appx. Q, Ex. 6 (Zepol Importation Report regarding Toshiba model BDX3400). These devices are imported into the United States from their assembly point in China via the Port of Long Beach. *See id.* at 1 (Year 2013 bill of lading showing units of the BDX3400 being shipped from Toshiba Logistics Hong Kong Co. Ltd. in Hong Kong to Toshiba Logistics America, Inc. in Irvine, California via the Port of Long Beach). Additionally, the devices themselves have labels bearing the phrase "made in China." *Id.* at 6. They were then imported into the United States. For example, a representative of Complainant purchased one device as depicted. *Id.* at 2 (B&H Photo receipt, second item in list). The Toshiba BDX3400 contains a MediaTek MT8551 chip. *Id.* at 9.
- As another example, Yamaha Blu-ray disc player products are examples of the Accused MT8555 Products. Appx. Q, Ex. 7 at 1-11 (Zepol Importation Report concerning Yamaha Blu-ray disc player model BD-A1020). The devices are imported into the United States from China and South Korea via the ports of Long Beach and Los Angeles, California and Tacoma, Washington. *Id.* at 1-2. Furthermore, the devices themselves state that they are "Made in China." *Id.* at 7. The Yamaha BD-A1020 Blu-ray disc player contains the MediaTek MT8555 chip. *Id.* at 9-10.
- 97. As another example, Lenovo tablet products are examples of both the Accused MT8125 Products and the Accused MT6628 Products. Appx. Q, Ex. 8 at 1-3 (receipt, packaging, and photographs of a Lenovo Tablet PC IdeaTab S6000-F). These devices are imported into the United States from China. *Id.* at 2-3 (photos of packaging indicating "Country Origin" is "Made in China"). Additionally, the devices themselves have labels bearing the phrase "Made in China." *Id.* at 4. They were then imported into the United States. For example, a representative of Complainant purchased one Lenovo IdeaTab S6000 as depicted. *Id.* at 1

(Best Buy receipt). The IdeaTab S6000-F contains both a MediaTek MT8125 chip and a MediaTek MT6628 chip. *Id.* at 5-9.

- 98. As another example, Vizio television products are examples of both the Accused MT5395 Products and the Accused MT5580 Products. Appx. Q, Ex. 9 at 1-3 (receipt, packaging, and photographs of a Vizio E470i television). These devices are imported into the United States from Mexico. *Id.* at 3 (photos of packaging indicating "Assembled in Mexico"). *See also* Appx. Q, Ex. 10 at 1-4 (receipt, packaging, and photographs of a Vizio E500i television, and packaging indicating "Assembled in Mexico"); and Appx. Q, Ex. 11 at 1-4 (receipt, packaging, and photographs of a Vizio M3D460SR television and packaging indicating "Made in China"). They were then imported into the United States. For example, a representative of Complainant purchased one E500i television, one E470i television, and one M3D460SR television (Walmart receipts) as depicted. The E500i television and E470i television both contain a MediaTek MT5580 chip. Appx. Q, Ex. 10 at 5-6; Appx. Q, Ex. 9 at 4-5. The M3D460SR television contains a MediaTek MT5395 chip. Appx. Q, Ex. 11 at 5-6.
- 99. On information and belief, Respondents AmTRAN and TPV Display (and its sister company Trend Smart) are responsible for unfair acts committed by, directly and/or indirectly, selling for importation, importing, and/or selling after importation televisions under the Vizio name that incorporate the MediaTek Integrated Circuits. Appx. Q, Ex. 9 at 5-6 (indication of "AmTRAN" as manufacturer); and Appx. Q, Ex. 10 at 7 (indication of source "TPV").
- 100. Upon information and belief, Respondents Best Buy Co., Inc., Newegg Inc., Buy.com Inc., Walmart Stores, Inc., B&H, Costco, and Amazon.com, Inc., import into the United States, sell for importation, and/or sell or offer for sale within the United States after importation the Accused Products as set forth in the tables in Section VI below.

VI. UNLAWFUL AND UNFAIR ACTS COMMITTED BY PROPOSED RESPONDENTS—PATENT INFRINGEMENT

101. On information and belief, MediaTek unlawfully sells for importation into the United States, imports into the United States, and/or sells within the United States after importation, Accused Products manufactured abroad that infringe one or more claims of the Asserted Patents. MediaTek's infringing Accused Products are incorporated into downstream end products by other Respondents, including end products such as televisions, Blu-ray players, and wireless phones.

102. The Accused Products are categorized in groups according to the MediaTek Integrated Circuit contained within, as described in the table below:

Group	Respondents	Accused End
	2	Product Models
Accused MT5395 Products	Sharp,	LC-40LE835U
	Amazon.com, Best Buy	LC-60LE832U
		LC-70LE732U
	Vizio, AmTRAN, TPV Display, Trend	M420SV
	Smart	E472VL
	Buy.com, Amazon.com, Walmart	E3D420VX
		M3D460SR
Accused MT5396 Products	Sharp,	LC-60LE650U
	Amazon.com, Best Buy, Newegg,	LC-60LE857U
	Buy.com/Rakuten	LC-60LE757U
		LC-60C6500U
		LC-80LE757U
	,	LC-70LE757U
		LC-70LE650U
		LC-60LE847U
*		
Accused MT5580 Products	Vizio, AmTRAN, TPV Display, Trend	E420i-A0
	Smart	E470i-A0
	Walmart	E500i-A1
Accused MT6589 Products	BLU Products,	BLU Dash 4.5
	Amazon.com, Best Buy, Newegg,	BLU Life Play phone
	Buy.com/Rakuten	
Accused MT6628 Products	ASUS,	MeMO Pad ME173X
	Amazon.com, Best Buy, Newegg,	
	Buy.com/Rakuten	

Group	Respondents	Accused End
		Product Models
	BLU Products,	BLU Dash 4.5
	Amazon.com, Best Buy, Walmart,	BLU Life Play phone
	Buy.com/Rakuten	
	Lenovo,	IdeaTab S6000
¥	Best Buy	IdeaTab A3000
	v.	60043 Yoga Tablet
Accused MT8125 Products	ASUS,	MeMO Pad ME173X
* ,	Amazon.com, Best Buy, Newegg,	- b
ā	Buy.com/Rakuten	
	Lenovo,	IdeaTab S6000
*	Best Buy	Idea Tab A3000
		60043 Yoga Tablet
	Acer	A1-810-L416 Iconia
	Amazon.com	A1 tablet
Accused MT8551 Products	Toshiba,	BDX3400
	Amazon.com, Best Buy, Walmart,	BDX2400
"	Newegg, Buy.com/Rakuten, B&H	BDK33
	Photo	
Accused MT8555 Products	Yamaha,	BD-A1020
	Amazon.com, Best Buy, Newegg,	BD-S473
	B&H Photo	

103. Respondents unlawfully sell for importation, import, and/or sell after importation into the United States at least the MediaTek Integrated Circuits, and at least the listed products containing the same, that infringe, literally or under the doctrine of equivalents, at least the patent claims listed below:

U.S. Patent No.	Asserted Claims	Accused Product Groups	Manufacturing Respondents
Torres '926	1, 7, 11, 16	MT5395	MediaTek, Sharp, Vizio, AmTRAN,
	8	1 8	TPV Display, Trend Smart
		MT5396	MediaTek, Sharp
		MT5580	Vizio, AmTRAN, TPV Display,
		\ \	Trend Smart
	-	MT8551	MediaTek, Toshiba
		MT8555	MediaTek, Yamaha
Hunter '432	1, 4, 5	MT5396	MediaTek, Sharp
		MT5580	Vizio, AmTRAN, TPV Display,
		f.	Trend Smart
		MT6628	MediaTek, ASUS, BLU Products,
	7		Lenovo

		MT6589	MediaTek, BLU Products
		MT8125	MediaTek, ASUS, Lenovo, Acer
		MT8555	MediaTek, Yamaha
Rachedine '505	1, 2	MT5395	MediaTek, Sharp, Vizio, AmTRAN,
			TPV Display, Trend Smart
		MT6628	MediaTek, ASUS, BLU Products,
	2		Lenovo
Starnes '947	1, 2, 17, 18	MT5396	MediaTek, Sharp
		MT5580	Vizio, AmTRAN, TPV Display,
			Trend Smart
		MT6589	MediaTek, BLU Products
		MT6628	MediaTek, ASUS, BLU Products,
			Lenovo
		MT8125	MediaTek, ASUS, Lenovo, Acer
		MT8555	MediaTek, Yamaha
	1, 2, 17	MT8551	MediaTek, Toshiba
Hess '276	1, 2, 5, 8, 9,	MT5395	MediaTek, Sharp, Vizio, AmTRAN,
	16, 17	4	TPV Display, Trend Smart
	***	MT5396	MediaTek, Sharp
		MT8551	MediaTek, Toshiba
Jetton '716	1, 5, 6, 7	MT5396	MediaTek, Sharp
		MT5580	Vizio, AmTRAN, TPV Display,
			Trend Smart

Jetton '716	1, 5, 6, 7	MT5396	MediaTek, Sharp
		MT5580	Vizio, AmTRAN, TPV Display,
	(B)		Trend Smart
		MT6589	MediaTek, BLU Products
		MT8125	MediaTek, ASUS, Lenovo, Acer
	9 8	MT8551	MediaTek, Toshiba
	1, 5, 6, 7, 8	MT6628	MediaTek, ASUS, BLU Products,
	*		Lenovo
	1, 5, 6	MT8555	MediaTek, Yamaha

U.S. Patent No.	Asserted	Accused Product	Retailer Respondents
	Claims	Groups	
Torres '926	1, 7, 11, 16	MT5395	Amazon.com, Best Buy
	×.	MT5396	Amazon.com, Best Buy, Walmart,
, A S			Newegg, Buy.com/Rakuten
н		MT5580	Walmart
	7	MT8551	Amazon.com, Best Buy, Walmart,
20		2	Newegg, Buy.com/Rakuten, B&H
			Photo
		MT8555	Amazon.com, Best Buy, Newegg,
		×	B&H Photo

Hunter '432	1, 4, 5	MT5396	Amazon.com, Best Buy, Walmart,
Huller 432	1, 4, 5	W113390	Newegg, Buy.com/Rakuten
		MT5580	Walmart
		MT6628	Amazon.com, Best Buy, Walmart,
		1,11,0020	Newegg, Buy.com/Rakuten
		MT6589	Amazon.com, Best Buy, Newegg,
			Buy.com/Rakuten
		MT8125	Amazon.com, Best Buy, Newegg,
			Buy.com/Rakuten
		MT8555	Amazon.com, Best Buy, Newegg,
		*	B&H Photo
Rachedine '505.	1, 2	MT5395	Amazon.com, Best Buy
		MT6628	Amazon.com, Best Buy, Walmart,
			Newegg, Buy.com/Rakuten
Starnes '947	1, 2, 17, 18	MT5396	Amazon.com, Best Buy, Walmart,
			Newegg, Buy.com/Rakuten
		MT5580	Walmart
	,	MT6589	Amazon.com, Best Buy, Newegg,
			Buy.com/Rakuten
		MT6628	Amazon.com, Best Buy, Walmart,
			Newegg, Buy.com/Rakuten
		MT8125	Amazon.com, Best Buy, Newegg,
			Buy.com/Rakuten
		MT8555	Amazon.com, Best Buy, Newegg,
			B&H Photo
	1, 2, 17	MT8551	Amazon.com, Best Buy, Walmart,
			Newegg, Buy.com/Rakuten, B&H
			Photo
Hess '276	1, 2, 5, 8, 9,	MT5395	Amazon.com, Best Buy
	16, 17	MT5396	Amazon.com, Best Buy, Walmart,
			Newegg, Buy.com/Rakuten
		MT8551	Amazon.com, Best Buy, Walmart,
			Newegg, Buy.com/Rakuten, B&H
			Photo
Jetton '716	1, 5, 6, 7	MT5396	Amazon.com, Best Buy, Walmart,
			Newegg, Buy.com/Rakuten
		MT5580	Walmart
		MT6589	Amazon.com, Best Buy, Newegg,
			Buy.com/Rakuten
		MT8125	Amazon.com, Best Buy, Newegg,
			Buy.com/Rakuten
	=	MT8551	Amazon.com, Best Buy, Walmart,
			Newegg, Buy.com/Rakuten, B&H
		1.000000	Photo
	1, 5, 6, 7, 8	MT6628	Amazon.com, Best Buy, Walmart,
0			Newegg, Buy.com/Rakuten

1, 5, 6	MT8555	Amazon.com, Best Buy, Newegg,
		B&H Photo

A. The Torres Patent

- On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT5395 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 7, 11, and 16 of the Torres Patent. Each Accused MT5395 Product contains a MediaTek MT5395 chip. The MT5395 chip was reverse engineered and found to contain the structures reported in Appendix V, Exs. 1 and 2. An analysis identifying where each element of the asserted claims exists within the MT5395 chip contained within each accused end product is attached as Appendix R, Ex. 1.³
- On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT5396 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 7, 11, and 16 of the Torres Patent. Each Accused MT5396 Product contains a MediaTek MT5396 chip. The MT5396 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 3. An analysis identifying where each element of the asserted claims exists within the MT5396 chip contained within each accused end product is attached as Appendix R, Ex. 2.
- 106. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT5580 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 7, 11, and 16 of the Torres Patent. Each Accused MT5580 Product contains a MediaTek MT5580 chip. The MT5580 chip was reverse engineered and found to

³ No part of any chart pertaining to infringement or technical prong of domestic industry attached to this Complaint construes, or is intended to construe, the specification, file history, or claims of any Asserted Patent. Moreover, the charts do not limit, and are not intended to limit, Freescale's infringement positions or contentions, or its positions or contentions with respect to the technical prong of domestic industry, or the claims on which Freescale may rely to establish the technical prong of the domestic industry requirement.

contain the structures reported in Appendix V, Ex. 4. An analysis identifying where each element of the asserted claims exists within the MT5580 chip contained within each accused end product is attached as Appendix R, Ex. 3.

- On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT8551 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 7, 11, and 16 of the Torres Patent. Each Accused MT8551 Product contains a MediaTek MT8551 chip. The MT8551 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 7. An analysis identifying where each element of the asserted claims exists within the MT8551 chip contained within each accused end product is attached as Appendix R, Ex. 4.
- On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT8555 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 7, 11, and 16 of the Torres Patent. Each Accused MT8555 Product contains a MediaTek MT8555 chip. The MT8555 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 8. An analysis identifying where each element of the asserted claims exists within the MT8555 chip contained within each accused end product is attached as Appendix R, Ex. 5.
- 109. Further discovery may reveal that other devices manufactured, sold for importation into the United States, imported into the United States, and/or sold after importation within the United States by Respondents or by others infringe the claims of the Asserted Patents. Further discovery may also reveal that additional claims of the Asserted Patents are infringed by Respondents' products or by the products of others.

B. The Hunter Patent

- 110. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT5396 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 4, and 5 of the Hunter Patent. Each Accused MT5396 Product contains a MediaTek MT5396 chip. The MT5396 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 3. An analysis identifying where each element of the asserted claims exists within the MT5396 chip contained within each accused end product is attached as Appendix R, Ex. 6.
- 111. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT5580 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 4, and 5 of the Hunter Patent. Each Accused MT5580 Product contains a MediaTek MT5580 chip. The MT5580 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 4. An analysis identifying where each element of the asserted claims exists within the MT5580 chip contained within each accused end product is attached as Appendix R, Ex. 7.
- 112. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT6628 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 4, and 5 of the Hunter Patent. Each Accused MT6628 Product contains a MediaTek MT6628 chip. The MT6628 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 6. An analysis identifying where each element of the asserted claims exists within the MT6628 chip contained within each accused end product is attached as Appendix R, Ex. 8.
- On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the

United States Accused MT6589 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 4, and 5 of the Hunter Patent. Each Accused MT6589 Product contains a MediaTek MT6589 chip. The MT6589 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 5. An analysis identifying where each element of the asserted claims exists within the MT6589 chip contained within each accused end product is attached as Appendix R, Ex. 9.

- On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT8125 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 4, and 5 of the Hunter Patent. Each Accused MT8125 Product contains a MediaTek MT8125 chip. The MT8125 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 5. An analysis identifying where each element of the asserted claims exists within the MT8125 chip contained within each accused end product is attached as Appendix R, Ex. 10.
- 115. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT8555 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 4, and 5 of the Hunter Patent. Each Accused MT8555 Product contains a MediaTek MT8555 chip. The MT8555 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 8. An analysis identifying where each element of the asserted claims exists within the MT8555 chip contained within each accused end product is attached as Appendix R, Ex. 11.
- 116. Further discovery may reveal that other devices manufactured, sold for importation into the United States, imported into the United States, and/or sold after importation within the United States by Respondents or by others infringe the claims of the Asserted Patents. Further discovery may also reveal that additional claims of the Asserted Patents are infringed by Respondents' products or by the products of others.

C. The Rachedine Patent

- 117. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT5395 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1 and 2 of the Rachedine Patent. Each Accused MT5395 Product contains a MediaTek MT5395 chip. The MT5395 chip was reverse engineered and found to contain the structures reported in Appendix V, Exs. 1 and 2. An analysis identifying where each element of the asserted claims exists within the MT5395 chip contained within each accused end product is attached as Appendix R, Ex. 12.
- 118. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT6628 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1 and 2 of the Rachedine Patent. Each Accused MT6628 Product contains a MediaTek MT6628 chip. The MT6628 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 6. An analysis identifying where each element of the asserted claims exists within the MT6628 chip contained within each accused end product is attached as Appendix R, Ex. 13.
- 119. Further discovery may reveal that other devices manufactured, sold for importation into the United States, imported into the United States, and/or sold after importation within the United States by Respondents or by others infringe the claims of the Asserted Patents. Further discovery may also reveal that additional claims of the Asserted Patents are infringed by Respondents' products or by the products of others.

D. The Starnes Patent⁴

- On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT5396 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 2, 17, and 18 of the Starnes Patent. Each Accused MT5396 Product contains a MediaTek MT5396 chip. The MT5396 chip was reverse engineered and found to contain the structures reported in Appendix. V, Ex. 3. An analysis identifying where each element of the asserted claims exists within the MT5396 chip contained within each accused end product is attached as Appendix R, Ex. 14.
- 121. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT5580 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 2, 17, and 18 of the Starnes Patent. Each Accused MT5580 Product contains a MediaTek MT5580 chip. The MT5580 chip was reverse engineered and found to contain the structures reported in Appendix. V, Ex. 4. An analysis identifying where

⁴ Without limiting or intending to limit its contentions, Freescale currently alleges that Mediatek and downstream Respondents directly infringe method claims 17 and 18 of the Starnes '947 patent prior to and/or upon importation because on information and belief, the Accused Products are used and tested prior to importation, and also because the accused products can only be used in an infringing manner. On information and belief, these method claims also are directly infringed by users of the Accused Products after importation. Further, Mediatek and downstream Respondents have induced and/or are inducing the infringement of claims 17 and 18 of the Starnes '947 patent. On information and belief, Mediatek and downstream Respondents were aware of the Starnes '947 patent at least as early as of the filing of this complaint. Moreover, on information and belief, Mediatek and downstream Respondents sold for importation into the United States, imported into the United States and/or sold or offered for sale after importation the Accused Products, and are continuing to do so, to customers and others specifically intending to actively encourage such customers and others to use the Accused Products in the United States in a manner that Mediatek and downstream Respondents know to be infringing. On information and belief, those customers and others in fact used the Accused Products in the United States in an infringing matter. Further, Mediatek and downstream respondents contributorily infringe the Starnes '947 patent through their sale and offers to sell within the United States after importation, their sale for importation and/or their importation into the United Stated of components of the Accused Products and/or Accused Products for use in practicing a process, constituting a material part of the Starnes '947 patent, knowing the same to be especially made or especially adapted for use in an infringement of the Starnes '947 patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use. On information and belief, Mediatek and downstream respondents were aware of the Starnes '947 patent at least as early as of the filing of this complaint.

each element of the asserted claims exists within the MT5580 chip contained within each accused end product is attached as Appendix R, Ex. 15.

- On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT6589 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 2, 17, and 18 of the Starnes Patent. Each Accused MT6589 Product contains a MediaTek MT6589 chip. The MT6589 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 5. An analysis identifying where each element of the asserted claims exists within the MT6589 chip contained within each accused end product is attached as Appendix R, Ex. 16.
- 123. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT6628 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 2, 17, and 18 of the Starnes Patent. Each Accused MT6628 Product contains a MediaTek MT6628 chip. The MT6628 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 6. An analysis identifying where each element of the asserted claims exists within the MT6628 chip contained within each accused end product is attached as Appendix R, Ex. 17.
- On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT8125 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 2, 17, and 18 of the Starnes Patent. Each Accused MT8125 Product contains a MediaTek MT8125 chip. The MT8125 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 5. An analysis identifying where each element of the asserted claims exists within the MT8125 chip contained within each accused end product is attached as Appendix R, Ex. 18.

- 125. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT8551 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 2, and 17 of the Starnes Patent. Each Accused MT8551 Product contains a MediaTek MT8551 chip. The MT8551 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 7. An analysis identifying where each element of the asserted claims exists within the MT8551 chip contained within each accused end product is attached as Appendix R, Ex. 19.
- States, selling for importation into the United States, and/or selling after importation into the United States Accused MT8555 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 2, 17, and 18 of the Starnes Patent. Each Accused MT8555 Product contains a MediaTek MT8555 chip. The MT8555 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 8. An analysis identifying where each element of the asserted claims exists within the MT8555 chip contained within each accused end product is attached as Appendix R, Ex. 20.
- 127. Further discovery may reveal that other devices manufactured, sold for importation into the United States, imported into the United States, and/or sold after importation within the United States by Respondents or by others infringe the claims of the Asserted Patents. Further discovery may also reveal that additional claims of the Asserted Patents are infringed by Respondents' products or by the products of others.

E. The Hess Patent

On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT5395 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 2, 5, 8, 9, 16, and 17 of the Hess Patent. Each Accused MT5395

Product contains a MediaTek MT5395 chip. The MT5395 chip was reverse engineered and found to contain the structures reported in Appendix V, Exs. 1 and 2. An analysis identifying where each element of the asserted claims exists within the MT5395 chip contained within each accused end product is attached as Appendix R, Ex. 21.

- On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT5396 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 2, 5, 8, 9, 16, and 17 of the Hess Patent. Each Accused MT5396 Product contains a MediaTek MT5396 chip. The MT5396 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 3. An analysis identifying where each element of the asserted claims exists within the MT5396 chip contained within each accused end product is attached as Appendix R, Ex. 22.
- States, selling for importation into the United States, and/or selling after importation into the United States Accused MT8551 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 2, 5, 8, 9, 16, and 17 of the Hess Patent. Each Accused MT8551 Product contains a MediaTek MT8551 chip. The MT8551 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 7. An analysis identifying where each element of the asserted claims exists within the MT8551 chip contained within each accused end product is attached as Appendix R, Ex. 23.
- 131. Further discovery may reveal that other devices manufactured, sold for importation into the United States, imported into the United States, and/or sold after importation within the United States by Respondents or by others infringe the claims of the Asserted Patents. Further discovery may also reveal that additional claims of the Asserted Patents are infringed by Respondents' products or by the products of others.

F. The Jetton Patent

- 132. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT5396 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1 and 5-7 of the Jetton Patent. Each Accused MT5396 Product contains a MediaTek MT5396 chip. The MT5396 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 3. An analysis identifying where each element of the asserted claims exists within the MT5396 chip contained within each accused end product is attached as Appendix R, Ex. 24.
- States, selling for importation into the United States, and/or selling after importation into the United States Accused MT5580 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1 and 5-7 of the Jetton Patent. Each Accused MT5580 Product contains a MediaTek MT5580 chip. The MT5580 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 4. An analysis identifying where each element of the asserted claims exists within the MT5580 chip contained within each accused end product is attached as Appendix R, Ex. 25.
- On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT6589 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1 and 5-7 of the Jetton Patent. Each Accused MT6589 Product contains a MediaTek MT6589 chip. The MT6589 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 5. An analysis identifying where each element of the asserted claims exists within the MT6589 chip contained within each accused end product is attached as Appendix R, Ex. 26.
- On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the

United States Accused MT6628 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1 and 5-8 of the Jetton Patent. Each Accused MT6628 Product contains a MediaTek MT6628 chip. The MT6628 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 6. An analysis identifying where each element of the asserted claims exists within the MT6628 chip contained within each accused end product is attached as Appendix R, Ex. 27.

- States, selling for importation into the United States, and/or selling after importation into the United States Accused MT8125 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1 and 5-7 of the Jetton Patent. Each Accused MT8125 Product contains a MediaTek MT8125 chip. The MT8125 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 5. An analysis identifying where each element of the asserted claims exists within the MT8125 chip contained within each accused end product is attached as Appendix R, Ex. 28.
- 137. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT8551 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1 and 5-7 of the Jetton Patent. Each Accused MT8551 Product contains a MediaTek MT8551 chip. The MT8551 chip was reverse engineered and found to contain the structures reported in Appendix V, Ex. 7. An analysis identifying where each element of the asserted claims exists within the MT8551 chip contained within each accused end product is attached as Appendix R, Ex. 29.
- 138. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States Accused MT8555 Products that directly infringe, literally or under the doctrine of equivalents, at least claims 1, 5, and 6 of the Jetton Patent. Each Accused MT8555 Product contains a MediaTek MT8555 chip. The MT8555 chip was reverse engineered and found to

contain the structures reported in Appendix V, Ex. 8. An analysis identifying where each element of the asserted claims exists within the MT8555 chip contained within each accused end product is attached as Appendix R, Ex. 30.

139. Further discovery may reveal that other devices manufactured, sold for importation into the United States, imported into the United States, and/or sold after importation within the United States by Respondents or by others infringe the claims of the Asserted Patents. Further discovery may also reveal that additional claims of the Asserted Patents are infringed by Respondents' products or by the products of others.

VII. THE DOMESTIC INDUSTRY

140. A domestic industry exists in the United States as required by 19 U.S.C. § 1337 (a)(3)(A), (B) and/or (C) because Complainant has made (1) significant investment within the United States in plant and equipment, (2) significant employment within the United States of labor or capital, and/or (3) substantial investment within the United States with respect to articles protected by the Asserted Patents, including in the exploitation of the Asserted Patents through engineering and research and development. Specific non-limiting examples of such investments are provided below.

A. Complainant's Substantial Exploitation of the Asserted Patents in the United States

141. Complainant has made significant investments in plant, equipment, labor and capital in the United States with respect to articles protected by the Asserted Patents, and substantial investment in the exploitation of the Asserted Patents through engineering, and research and development.

1. Past Research and Development

142. Complainant and its predecessors are recognized leaders in research and development in integrated circuit technology.

2. Current Engineering, Research, and Development

143. Complainant continues to invest heavily in research and development. For example, Complainant expended \$755 million and \$742 million on research and development on revenues of \$4.19 billion and \$3.95 billion for fiscal years 2013 and 2012, respectively. Appx. S, Ex. 1 at 6, 8 (Freescale Semiconductor Announces Fourth Quarter and Full-Year 2013 Results).

B. Freescale's Practice of the Asserted Patents and Related Significant Investments in the United States

144. Freescale has made, and continues to make, significant domestic investments in the United States concerning the manufacture, engineering, design, and research and development with respect to articles protected by the Asserted Patents.

Torres ('926) and Hess ('276)

Patents into a series of specific products sold in the United States. Those products, as listed by part identifier in Appendix U, Ex. 1, all include the bond pad layout structure claimed in the Torres Patent and the bond pad structure claimed in the Hess Patent. An analysis of those structures identifying where each element of at least one claim of the Torres and Hess Patents exists in the P1020 product is set forth in Appendix T, Domestic Industry Claim Charts, Exs. 1 and 5, respectively. The analysis of the P1020 in Appendix T, Exs. 1 and 5 is the same for (and directly applicable to) the other listed products, all of which contain the same relevant structures, which are listed in Appendix U, Ex. 1, and which accounted in United States sales in 2013 and through March in 2014. Appx. U, Ex. 1 (U.S. sales).

Research and Development: Freescale has made substantial United States 146. research and development expenditures concerning the design of the P10xx and P20xx products. To develop the P10xx and P20xx products, including the bond pad design and structure of the Torres Patent and the Hess Patent, Freescale had numerous individuals working in the United States on the project over the 2008 to 2013 timeframe. The salary and overhead resources in the United States associated with this project amounted to Appx. U, Ex. 2 (P10xx U.S. salary and overhead). In addition, the development cost for the new product introduction of the P10xx series amounted to in the United States. Appx. U, Ex. 3 (P10xx investment cost). Plant and Equipment: The United States expenditures included production hardware costs of as well as full time equivalent ("FTE") man-hours for product design of Id. Labor or Capital: In addition to the United States research and development investments, Freescale incurred significant production costs in the United States of over the period of 2009-2013 Appx. U, Ex. 4 (P10xx manufacturing costs). *Total Investment*: Total expenditures by Freescale in the United States corresponding to the products that are protected by the Torres and Hess patents amount to

Jetton ('716) and Starnes ('947)

147. Freescale has also incorporated the technology of the Jetton ('716) and Starnes ('947) Patents into a series of specific products sold in the United States. Those products amounted to in United States sales in 2013 and in United States sales to date in 2014. Appx. U, Ex. 5 (C90/C55 sales). The finished goods ("FGDS") part numbers incorporating the Jetton and Starnes claimed technology – and

⁵ Freescale's introductory references in this Section to general categories of investments (e.g., "Research and Development," "Plaint and Equipment," or "Labor or Capital") are not intended to limit the statutory sections (i.e., Section 337 (a)(3)(A), (B) and/or (C)) to which its investments may apply.

associated sales for 2013 and 2014 – are listed in Appendix U, Exs. 6 and 7, respectively. The individual FGDS part numbers correspond to mask sets that each incorporate the circuit designs of the Jetton Patent and the Starnes Patent is listed in Appendix U, Ex. 8; see also Appx. U, Ex. 15. An analysis of the circuitry contained in the Freescale C90TFS identifying where each element of at least one claim of the Starnes and Jetton Patents exists is contained in Appendix T, Ex. 4 and Ex. 6, respectively. The analysis in Appendix T, Exs. 4 and 6 is the same for (and directly applicable to) the other Freescale products listed in Appendix U, Ex. 8, all of which contain the same relevant structures.

148. Research and Development: Freescale has made substantial research and development expenditures in the United States concerning the design of the products listed in Appendix U, Ex. 8. In particular, as is shown in Appendix U, Exs. 9a – 9e, over a period of 2010 through January 2014 the salary and overhead attributable to individuals working in the United States on research and development, design, and engineering of the particular products listed in Appendix U, Ex. 8 is . Total Investment: Total expenditures by Freescale in the United States corresponding to the products that are protected by the Jetton and Starnes patents amount to

Hunter ('432)

of specific products, MPC8548, MPC8572, MPC8533, MPC8568 and MPC8536 (collectively, the "PQ38" logical part number). That product set had sales of in the United States in 2013 and in the United States through March of 2014. Appx. U, Ex. 10. An analysis of the circuitry contained in the MPC8548 identifying where each element of at least one claim of the Hunter Patent exists is contained in Appendix T, Ex. 2. The analysis in Appendix T, Ex. 2 is the same for (and directly applicable to) the other PQ38 products, all of which contain the same relevant structures.

150. Research and Development: Freescale has made substantial research and
development expenditures in the United States covering the technology of the Hunter Patent and
the design of the PQ38 product set. In particular, as shown in Appendix U, Ex. 11, the
engineering and research and development consumed
. Additionally, other development costs (such as masks sets,
engineering wafers, etc.) required expenditures of the state of the st
engineering and research and development costs in the United States for the PQ38 product set
was . Id. Labor or Capital: In addition, the United States
manufacturing costs for the PQ38 product set amounted to in 2013
and another in 2012. Appx. U, Ex. 12. <i>Total Investment</i> : Total
expenditures by Freescale in the United States corresponding to the products that are protected
by the Hunter Patents amount to

Rachedine ('505)

- 152. **Research and Development:** Freescale has also made substantial research and development expenditures in the United States concerning the technology of the Rachedine Patent and the design of the Mohave product set. In particular, as shown in Appendix U, Exs. 14a 14c, the salary and overhead attributable to individuals working in the United States on the

. *Total Investment:* Total expenditures by Freescale in the United States corresponding to the products that are protected by the Rachedine Patents amount to

VIII. HARMONIZED TARIFF SCHEDULE INFORMATION

153. The articles subject to this complaint are classified under at least the following headings and subheadings of the Harmonized Tariff Schedule ("HTS") of the United States: 8517.12.00, 8519.81.30, 8521.90.00, 8528.59.10, 8529.90.06, and 8542.39.00. These HTS numbers are illustrative only and are not intended to restrict the scope of this investigation.

IX. RELATED LITIGATION

154. On this date, Freescale commenced an action in U.S. District Court against certain of the Respondents named herein based on their alleged infringement of the Asserted Patents.

On information and belief, the Asserted Patents have not been the subject of any other court or agency litigation, domestic or foreign.

X. RELIEF REQUESTED

WHEREFORE, by reason of the foregoing, Complainant respectfully requests that the United States International Trade Commission:

(a) Institute an immediate investigation pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, into the violations by Respondents of Section 337 arising from the importation into the United States, and/or sale for importation, and/or sale within the United States after importation, of Respondents' products that infringe one or more claims of U.S. Patent Nos. 5,962,926 (Torres), 7,158,432 (Hunter), 7,230,505

- (Rachedine), 7,518,947 (Starnes), 7,626,276 (Hess), 7,746,716 (Jetton);
- (b) Schedule and conduct a hearing, pursuant to 19 U.S.C. § 1337(c), for purposes of receiving evidence and hearing argument concerning whether there has been a violation of Section 337 of the Tariff Act of 1930, as amended; and, following the hearing, determine that there has been a violation of Section 337 of the Tariff Act of 1930, as amended;
- (c) Issue a general, or in the alternative, a limited exclusion order, pursuant to 19 U.S.C. § 1337(d), excluding from entry for consumption into the United States, entry for consumption from a foreign trade-zone, or withdrawal from a warehouse for consumption, integrated circuits and products containing the same that infringe one or more clams of U.S. Patent Nos. 5,962,926, 7,158,432, 7,230,505, 7,518,947, 7,626,276, 7,746,716 and which are manufactured by or on behalf of, or imported by or on behalf of Respondents, or any of their affiliated companies, parents, subsidiaries, or other related business entities, or their successors or assigns, for the remaining terms of the Asserted Patents, except under license of Complainant or as provided by law;
- (d) Issue permanent cease-and-desist orders, pursuant to 19 U.S.C. §
 1337(f), directing Respondents and any of their principals,
 stockholders, officers, directors, employees, agents, licensees,
 distributors, controlled (whether by stock ownership or otherwise)
 or majority-owned business entities, successors, and assigns, from

either directly engaging in or for, with or otherwise on behalf of Respondents, (A) importing or selling for importation into the United States integrated circuits and products containing the same that infringe one or more claims of U.S. Patent Nos. 5,962,926, 7,158,432, 7,230,505, 7,518,947, 7,626,276, 7,746,716; (B) marketing, distributing, offering for sale, selling, or otherwise transferring, in the United States imported audiovisual components and products containing the same that infringe one or more claims of U.S. Patent Nos. 5,962,926, 7,158,432, 7,230,505, 7,518,947, 7,626,276, 7,746,716; (C) advertising imported audiovisual components and products containing the same in the United States that infringe one or more claims of U.S. Patent Nos. 5,962,926, 7,158,432, 7,230,505, 7,518,947, 7,626,276, 7,746,716; (D) soliciting U.S. agents or distributors for audiovisual components and products containing the same that infringe one or more claims of U.S. Patent Nos. 5,962,926, 7,158,432, 7,230,505, 7,518,947, 7,626,276, 7,746,716; and (E) aiding or abetting other entities in the importation, sale for importation, sale after importation, transfer, or distribution or audiovisual components and products containing the same that infringe one or more claims of U.S. Patent Nos. 5,962,926, 7,158,432, 7,230,505, 7,518,947, 7,626,276, 7,746,716; and

(e) Grant all such other and further relief as the Commission has authority to grant and deems appropriate under the law, based upon the facts complained of herein and as determined by the Investigation.

Dated: May 12, 2014

Respectfully submitted, McKool Smith, P.C.

Benjamin Levi

1999 K Street NW, Suite 600 Washington, DC 20006-1101 Telephone: (202) 370-8300 Facsimile: (202) 370-8344

Steve J. Pollinger Pierre J. Hubert Trent E. Campione Christopher J. Mierzejewski Todd Bellaire 300 W. 6th Street, Suite 1700 Austin, TX 78701 Telephone: (512) 692-8700

Facsimile: (512) 692-8744

Robert M. Manley 300 Crescent Court, Suite 1500 Dallas, TX 75201 Telephone: (214) 978-4000 Facsimile: (214) 978-4044

Counsel for Complainant Freescale Semiconductor, Inc.