

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT5951712

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	RPX CORPORATION	09/19/2019
RECEIVING PARTY DATA		
Name:	TAIWAN SEMICONDUCTOR MANUFACTURING CO., LTD.	
Street Address:	NO. 8 LI-HSIN ROAD 6, HSINCHU SCIENCE PARK	
City:	HSINCHU	
State/Country:	TAIWAN	
Postal Code:	300	
PROPERTY NUMBERS Total: 65		
Property Type	Number	
Patent Number:	6999367	
Patent Number:	7001841	
Patent Number:	7015554	
Patent Number:	6768352	
Patent Number:	7377992	
Patent Number:	7037733	
Patent Number:	8331353	
Patent Number:	7094639	
Patent Number:	7648908	
Patent Number:	7576014	
Patent Number:	8350342	
Patent Number:	7447958	
Patent Number:	8633545	
Patent Number:	8471295	
Patent Number:	8381081	
Patent Number:	6466079	
Patent Number:	7238562	
Patent Number:	6815729	
Patent Number:	6853762	
Patent Number:	6456557	

Property Type	Number
Patent Number:	6459620
Patent Number:	6870982
Patent Number:	6469929
Patent Number:	6890107
Patent Number:	6611456
Patent Number:	7262072
Patent Number:	6590797
Patent Number:	6788576
Patent Number:	7763491
Patent Number:	6871307
Patent Number:	6892449
Patent Number:	6900663
Patent Number:	7016430
Patent Number:	6670852
Patent Number:	6326853
Patent Number:	6720632
Patent Number:	8237100
Patent Number:	6703298
Patent Number:	6518636
Patent Number:	6962853
Patent Number:	7036070
Patent Number:	6589827
Patent Number:	6710382
Patent Number:	7161946
Patent Number:	6377128
Patent Number:	6489811
Patent Number:	6518809
Patent Number:	6539051
Patent Number:	6617883
Patent Number:	6632746
Patent Number:	7282452
Patent Number:	7732339
Patent Number:	6657466
Patent Number:	6667668
Patent Number:	6690243
Patent Number:	7372928
Patent Number:	7379467
Patent Number:	6852610

Property Type	Number
Patent Number:	6709961
Patent Number:	7400173
Patent Number:	6642607
Patent Number:	6649496
Patent Number:	6955973
Patent Number:	6696995
Patent Number:	6731147

CORRESPONDENCE DATA

Fax Number: (703)205-8050

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 703-205-8000

Email: Spencer.Garth@bskb.com, Mailroom@BSKB.com

Correspondent Name: BIRCH, STEWART, KOLASCH & BIRCH, LLP

Address Line 1: 8110 GATEHOUSE ROAD

Address Line 2: SUITE 100E

Address Line 4: FALLS CHURCH, VIRGINIA 22042

NAME OF SUBMITTER:	SPENCER GARTH
SIGNATURE:	/spencer garth/
DATE SIGNED:	02/06/2020

Total Attachments: 4
source=RPX Patent Assignment to TSMC#page1.tif
source=RPX Patent Assignment to TSMC#page2.tif
source=RPX Patent Assignment to TSMC#page3.tif
source=RPX Patent Assignment to TSMC#page4.tif

Patent Assignment

This Patent Assignment ("Patent Assignment") is effective as of August 19, 2019, and is from RPX Corporation, a Delaware corporation, with principal place of business at One Market Plaza, Steuart Tower, Suite 1100, San Francisco, CA 94105 ("Seller"), to Taiwan Semiconductor Manufacturing Company, Ltd., a Taiwan corporation, with an address at No. 8 Li-Hsin Road 6, Hsinchu Science Park, Hsinchu, 300 Taiwan ("Buyer").

For good and valuable consideration, the receipt of which is hereby acknowledged, Seller hereby irrevocably assigns to Buyer Seller's entire right, title, and interest throughout the world in and to (a) the issued patents and pending patent applications identified on Schedule 1 hereto (the "Assigned Patents"), and (b) all causes of action (whether known or unknown or whether currently pending, filed or otherwise) and other enforcement rights under or on account of, the Assigned Patents, including, without limitation, all causes of action and other enforcement rights for damages, injunctive relief, and any other remedies of any kind for past, current and future infringement.

The terms and conditions of this Patent Assignment will inure to the benefit of Buyer, its successors, assigns, and other legal representatives and will be binding upon Seller, its successors, assigns, and other legal representatives. In the event of any conflict between the terms of this Patent Assignment and that Patent Sale Agreement between the Seller and Buyer dated August 14, 2019, the Patent Sale Agreement will govern.

Seller:

RPX Corporation

By: 

Name: Emily Gavin

Title: General Counsel

Date: 9/19/2019

Portfolio name	Case number	Asset status	Country	Application number	Filing date	Patent Number	Issue date	Publication number	Publication date	Patent family id
Panasonic Semi Process	Pansp-013-O	GRANTED	US	10337338	1/7/2003	US6662653B2	11/8/2005	US20030134517A1	7/17/2003	118600517
Panasonic Semi Process	Pansp-013-O	ABANDONED	JP	2000-011203	1/20/2000	JP3406265E2	3/7/2005			118600517
Panasonic Semi Process	Pansp-016-O	GRANTED	US	09/911618	7/25/2001	US6589827B2	7/8/2003	US20020019101A1	2/14/2002	12274933
Panasonic Semi Process	Pansp-016-O	GRANTED	US	10/428920	5/5/2003	US6710382B2	3/23/2004	US20030203554A1	10/30/2003	12274933
Panasonic Semi Process	Pansp-016-O	EXPIRED	US	10/769863	2/3/2004	US6969870B2	11/29/2005	US20040155304A1	8/12/2004	12274933
Panasonic Semi Process	Pansp-016-O	ABANDONED	JP	2000-226559	7/27/2000					
Panasonic Semi Process	Pansp-018-O	EXPIRED	US	10/620613	7/17/2003	US6800532B2	10/5/2004	US20040018692A1	1/29/2004	116260245
Panasonic Semi Process	Pansp-018-O	GRANTED	US	10/061365	2/4/2002	US6642670B2	11/4/2003	US20020135009A1	9/26/2002	116260245
Panasonic Semi Process	Pansp-018-O	ABANDONED	EP	20026498	2/5/2002			EP1229584A3		116260245
Panasonic Semi Process	Pansp-018-O	ABANDONED	IT	20026498	2/5/2002	IT1229584B	8/7/2002			114821027
Panasonic Semi Process	Pansp-018-O	ABANDONED	JP	2001-027914	2/5/2001					
Panasonic Semi Process	Pansp-018-O	ABANDONED	DE	2002-610834	2/5/2002	DE1229584B	9/14/2006			132881745
Panasonic Semi Process	Pansp-018-O	ABANDONED	FR	21102649.11	2/5/2002	FR1229584A	8/7/2002			135686056
Panasonic Semi Process	Pansp-018-O	ABANDONED	US	90/007390	1/24/2005					
Panasonic Semi Process	Pansp-019-O	GRANTED	US	09/679258	11/21/2001	US6649496B2	11/18/2003	US20020160605A1	10/31/2002	117027793
Panasonic Semi Process	Pansp-019-O	ABANDONED	CN	1800613.2	11/22/2001	CN1365515A	8/21/2002			117027793
Panasonic Semi Process	Pansp-019-O	ABANDONED	TW	90106967	3/23/2001					
Panasonic Semi Process	Pansp-019-O	ABANDONED	EP	2001915756	3/23/2001			EP1197997A4		117027793
Panasonic Semi Process	Pansp-019-O	ABANDONED	KR	20017014950	11/21/2001					
Panasonic Semi Process	Pansp-019-O	ABANDONED	JP	2000-081201	3/23/2000					
Panasonic Semi Process	Pansp-019-O	EXPIRED	WO	PCT/JP01/02381	3/23/2001	WO01/171785	9/27/2001			
Panasonic Semi Process	Pansp-023-O	GRANTED	US	10/314159	12/9/2002	US6956973B2	10/18/2005	US20030109114A1	6/12/2003	141298111
Panasonic Semi Process	Pansp-023-O	ABANDONED	JP	2001-377201	12/11/2001			2003179049	6/27/2003	
Panasonic Semi Process	Pansp-024-O	GRANTED	US	10/917308	8/13/2004	US6989367B2	2/14/2006	US20050047220A1	3/3/2005	116303923
Panasonic Semi Process	Pansp-024-O	ABANDONED	CN	CN2004156092	8/16/2004	CN1591684A	3/9/2005			116303923
Panasonic Semi Process	Pansp-024-O	ABANDONED	JP	2003-307667	8/29/2003	JP4090967A	5/28/2008			116303548
Panasonic Semi Process	Pansp-025-O	GRANTED	US	10/643990	8/20/2003	US7001841B2	2/21/2006	US20040175936A1	9/9/2004	118441620
Panasonic Semi Process	Pansp-025-O	ABANDONED	JP	2002-245509	8/26/2002					
Panasonic Semi Process	Pansp-026-O	GRANTED	US	10/756455	1/14/2004	US7015554B2	3/21/2006	US20040183141A1	9/23/2004	126442732
Panasonic Semi Process	Pansp-026-O	ABANDONED	JP	2003-037809	2/17/2003	JP3713020B2	11/2/2005			126442732
Panasonic Semi Process	Pansp-028-O	GRANTED	US	11/340540	1/27/2006	US7377992B2	5/27/2008	US20060189006A1	8/24/2006	124283261
Panasonic Semi Process	Pansp-028-O	EXPIRED	US	10/858402	6/2/2004	US7026173B2	4/11/2006	US20050054123A1	3/10/2005	124283261
Panasonic Semi Process	Pansp-028-O	EXPIRED	TW	93115989	6/3/2004	TW1244695B	12/1/2005	1244695		124283261
Panasonic Semi Process	Pansp-028-O	ABANDONED	JP	2003-168281	6/12/2003	JP4349848B2	7/31/2009			
Panasonic Semi Process	Pansp-031-O	GRANTED	US	10/343782	7/11/2002	US7037733B2	5/2/2006	US20040023421A1	2/5/2004	118439193
Panasonic Semi Process	Pansp-031-O	ABANDONED	EP	2741382.2	7/11/2002			EP1355138A4		118439193
Panasonic Semi Process	Pansp-031-O	ABANDONED	CN	2802042.1	7/11/2002					
Panasonic Semi Process	Pansp-031-O	ABANDONED	JP	2003-540606	10/10/2002					
Panasonic Semi Process	Pansp-031-O	ABANDONED	JP	2001-332217	10/30/2001					
Panasonic Semi Process	Pansp-031-O	ABANDONED	JP	2006-0144358	5/24/2006					
Panasonic Semi Process	Pansp-031-O	EXPIRED	WO	PC17/JP02/06655	7/1/2002			03/38384		5/8/2003
Panasonic Semi Process	Pansp-035-O	GRANTED	US	10/662288	9/16/2003	US7094639B2	8/22/2006	US20040087124A1	5/6/2004	124990816
Panasonic Semi Process	Pansp-035-O	ABANDONED	JP	2002-319909	11/11/2002			2004158487	6/3/2004	
Panasonic Semi Process	Pansp-035-O	ABANDONED	US	11/411929	4/27/2006	US20060205131A1		2004158487	9/14/2006	124990816
Panasonic Semi Process	Pansp-041-O	GRANTED	US	12/247507	10/8/2008	US7648808B2	1/19/2010	US20090098726A1	4/16/2009	121559138
Panasonic Semi Process	Pansp-041-O	ABANDONED	JP	2007-266681	10/12/2007			2009099585	5/7/2009	
Panasonic Semi Process	Pansp-041-O	EXPIRED	US	12/632397	12/7/2009	US7816267B2	10/19/2010	US20100087059A1	4/8/2010	121559138
Panasonic CMOS	PCMOS-031-O	ABANDONED	EP	11146687.5	6/19/2001			1168453	1/2/2002	
Panasonic CMOS	PCMOS-031-O	ABANDONED	JP	2000-185025	6/20/2000					
Panasonic CMOS	PCMOS-031-O	EXPIRED	JP	2001-127019	4/25/2001	JP03919462	2/23/2007			
Panasonic CMOS	PCMOS-031-O	GRANTED	US	09/865546	5/29/2001	US6720632B2	4/13/2004	US20020001926A1	1/3/2002	111131222
Panasonic CMOS	PCMOS-031-O	ABANDONED	US	10/773224	2/9/2004	US20040155289A1		US20040155289A1	8/12/2004	111131222
Panasonic CMOS	PCMOS-032-O	ABANDONED	JP	2000-117680	4/19/2000	JP03400770	2/21/2003			
Panasonic CMOS	PCMOS-032-O	ABANDONED	JP	H11-325527	11/16/1999					
Panasonic CMOS	PCMOS-032-O	GRANTED	US	09/837556	4/9/2001	US6632746B2	10/14/2003	US20020061654A1	5/23/2002	118574440
Panasonic CMOS	PCMOS-032-O	GRANTED	US	11/31180	5/18/2005	US7732339B2	6/8/2010	US20050221599A1	10/6/2005	118574440

Portfolio name	Case number	Asset status	Country	Application number	Filing date	Patent Number	Issue date	Publication number	Publication date	Patent family id
Parasonic CMOS	PCMOS-032-O	ABANDONED	US	10/679484	10/7/2003	US7282452B2	10/16/2007	US20040106297A1	6/3/2004	118574440
Parasonic CMOS	PCMOS-032-O	ABANDONED	US	12/766243	4/23/2010	US7965991B2	7/26/2011	US201000203733A1	8/12/2010	118574440
Parasonic CMOS	PCMOS-033-O	ABANDONED	JP	2000-327103	10/26/2000					
Parasonic CMOS	PCMOS-033-O	ABANDONED	JP	2001-299451	9/28/2001	JP03523627	2/20/2004			
Parasonic CMOS	PCMOS-033-O	GRANTED	US	10/642655	8/1/2001	US6852610B2	2/8/2005	US20040033649A1	2/19/2004	137788741
Parasonic CMOS	PCMOS-033-O	GRANTED	US	09/981806	10/19/2001	US20020058385A1		US20020058385A1	5/16/2002	137788741
Parasonic CMOS	PCMOS-034-O	ABANDONED	EP	2019813.1	9/5/2002			EP1291905A3		
Parasonic CMOS	PCMOS-034-O	ABANDONED	FR	2019813.1	9/5/2002	FR1291905A	2/8/2006			
Parasonic CMOS	PCMOS-034-O	ABANDONED	GB	2019813.1	9/5/2002	GB1291905A	2/8/2006			
Parasonic CMOS	PCMOS-034-O	ABANDONED	NL	2019813.1	9/5/2002	NL1291905	2/8/2006			
Parasonic CMOS	PCMOS-034-O	ABANDONED	DE	60209065.2	9/5/2002	DE1291905B	2/8/2006			
Parasonic CMOS	PCMOS-034-O	EXPIRED	JP	2001-271330	9/7/2001	JP03481223	10/10/2003			
Parasonic CMOS	PCMOS-034-O	GRANTED	US	10/235830	9/6/2002	US6709961B2	3/22/2004	US20030049917A1	3/13/2003	124964978
Parasonic CMOS	PCMOS-040-O	ABANDONED	JP	2004-339424	11/24/2004	JP04504791	4/30/2010	2006148021	6/8/2006	
Parasonic CMOS	PCMOS-040-O	GRANTED	US	11/283849	11/22/2005	US7576014B2	8/18/2009	US20060110935A1	5/25/2006	119469290
Parasonic CMOS	PCMOS-040-O	ABANDONED	US	12/494855	6/30/2009	US2009026781A1		US2009026781A1	10/29/2009	119469290
Parasonic CMOS	PCMOS-041-O	ABANDONED	JP	2008-121176	5/7/2008	JP05235486	4/5/2013	2009272423	11/19/2009	
Parasonic CMOS	PCMOS-041-O	GRANTED	US	12/424096	4/15/2009	US8350342B2	1/8/2013	US20090278209A1	11/12/2009	124987600
SNU Memory	SNUM-001-O	GRANTED	US	US11719923	12/6/2005	US8633545B2	1/21/2014	US20090108358A1		
SNU Memory	SNUM-001-O	GRANTED	JP	2007545368	12/6/2005	JP4950064B2	6/13/2012	JP4950064B2	6/13/2012	119499310
SNU Memory	SNUM-001-O	Expired	KR	20040104560	12/11/2004	KR100689211B1	3/8/2007	KR100689211B1	3/8/2007	158758855
SNU Memory	SNUM-002-O	GRANTED	US	US12312985	12/4/2007	US8471295B2	6/25/2013	US20100038698A1		
SNU Memory	SNUM-002-O	ABANDONED	KR	20060121143	12/4/2006	KR100856701B1	6/12/2008	9/4/2009	KR100856701B1	9/4/2008
SNU Memory	SNUM-002-O	EXPIRED	WO	2007006230	12/4/2007	WC2008069539A1	10/16/2013	12/4/2027	JP5317981B2	6/12/2008
SNU Memory	SNUM-002-O	ABANDONED	JP	2009540145	12/4/2007	JP5317981B2	9/17/2014	9/17/2014	JP5317981B2	10/16/2013
SNU Memory	SNUM-002-O	ABANDONED	JP	2012195079	9/5/2012	JP5592448B2	9/17/2014	9/17/2029	JP5592448B2	9/17/2014
Tower	TOWER-003-O	GRANTED	US	09/888353	6/21/2001	US6466079B1	10/15/2002			149612517
Tower	TOWER-005-O	GRANTED	US	09/941451	8/28/2001	US6456557B1	9/24/2002			147311185
Tower	TOWER-007-O	GRANTED	US	09/888348	6/21/2001	US6459620B1	10/11/2002			147308389
Tower	TOWER-008-O	GRANTED	US	09/935013	8/21/2001	US6469929B1	10/22/2002			149626673
Tower	TOWER-012-O	GRANTED	US	09/898725	7/3/2001	US6611456B2	8/26/2003	US20030046481A1	3/6/2003	146679057
Tower	TOWER-014-O	GRANTED	US	10/043677	1/9/2002	US6590797B1	7/8/2003			124034942
Tower	TOWER-015-O	GRANTED	US	10/282856	10/28/2002	US6788576B2	9/7/2004	US20040080982A1	4/29/2004	146690107
Tower	TOWER-017-O	GRANTED	US	09/975064	10/10/2001	US6871307B2	3/22/2005	US20030074611A1	4/17/2003	118758095
Tower	TOWER-019-O	GRANTED	US	10/154395	5/23/2002	US6703298B2	3/9/2004	US20030218204A1	11/27/2003	124976416