PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Flextronics AP, LLC	06/28/2012

RECEIVING PARTY DATA

Name:	DigitalOptics Corporation
Street Address:	3025 Orchard Parkway
City:	San Jose
State/Country:	CALIFORNIA
Postal Code:	95134

PROPERTY NUMBERS Total: 100

Property Type	Number
Application Number:	11998992
Application Number:	60872142
PCT Number:	US2007024923
Patent Number:	8083421
Application Number:	60891655
PCT Number:	US2007088949
Application Number:	12368454
Application Number:	61030937
PCT Number:	US2009034528
PCT Number:	US2008005298
Application Number:	12150119
Application Number:	60925947
Application Number:	13046563
PCT Number:	US2006034792
Patent Number:	7531773
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REEL: 028948 FRAME: 0790

Patent Number:	7580209
Patent Number:	7623301
Application Number:	60844781
PCT Number:	US2007019933
Application Number:	13404838
Application Number:	61446156
Application Number:	13404528
Application Number:	61446151
Patent Number:	8018528
Application Number:	61156692
PCT Number:	US2010025958
Application Number:	12716128
Patent Number:	7798730
PCT Number:	US2008005405
Application Number:	13149638
Patent Number:	7825985
Application Number:	12873995
Application Number:	60961312
PCT Number:	US2008008708
Patent Number:	7773876
PCT Number:	US2007023388
Patent Number:	7983556
Application Number:	60864348
PCT Number:	US2007023335
Application Number:	12590325
PCT Number:	US2010002913
Application Number:	13413202
Application Number:	61450040
Application Number:	13470098
Application Number:	61485276
Application Number:	12435080
Application Number:	12727973
Application Number:	61161621
PCT Number:	US2010028014
Patent Number:	7867806
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	13404512
Application Number:	61446113
Application Number:	12136033
Application Number:	60942953
Application Number:	12432590
Patent Number:	7830624
Application Number:	13403610
Application Number:	61446163
Patent Number:	7590505
PCT Number:	US2007017696
Patent Number:	7715129
Application Number:	60703539
Application Number:	60703531
PCT Number:	US2006029572
Patent Number:	7508606
PCT Number:	US2006029573
Patent Number:	7469100
Patent Number:	7873269
Application Number:	12930799
PCT Number:	US2006035660
Application Number:	60928135
Patent Number:	7806606
PCT Number:	US2008005659
Application Number:	60836616
Application Number:	61487895
Application Number:	13476420
Application Number:	12623420
PCT Number:	US2008005289
Application Number:	12150118
Application Number:	60925946
Application Number:	13204564
Application Number:	60715533
Patent Number:	8093092
Application Number:	12343985
Application Number:	12005686
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	US2008008999
Patent Number:	7477461
PCT Number:	US2007026335
Application Number:	12928026
Patent Number:	7796187
PCT Number:	US2006039521
Application Number:	11698776
PCT Number:	US2008001083
PCT Number:	US2010002251
Application Number:	12583193
Patent Number:	7457050
Application Number:	60743767
PCT Number:	US2007064840
Patent Number:	7573011
PCT Number:	US2007017698

CORRESPONDENCE DATA

 Fax Number:
 2692798830

 Phone:
 269-279-8820

Email: patentlawyer@frontier.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

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via US Mail.

Correspondent Name: Larry E. Henneman, Jr.

Address Line 1: 70 N. Main St.

Address Line 4: Three Rivers, MICHIGAN 49093

ATTORNEY DOCKET NUMBER:	0156-001
NAME OF SUBMITTER:	Larry E. Henneman, Jr.

Total Attachments: 9

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PATENT ASSIGNMENT

This Patent Assignment (the "Assignment") is made and entered into this 28th day of June, 2012 (the "Effective Date"), by and between FLEXTRONICS AP, LLC, a Colorado limited liability company, ("Assignor") and DIGITALOPTICS CORPORATION, a Delaware corporation ("Assignee"). Each of Assignor and Assignee are sometimes referred to herein individually, as a "Party" and, together as the "Parties." Defined terms not specifically defined herein shall have the meanings ascribed to them in the Stock and Asset Purchase Agreement, dated as of March 1, 2012, as amended (the "Purchase Agreement"), by and among Flextronics International Ltd., a public company limited by shares organized under the laws of the Republic of Singapore ("Seller"), Assignee and Tessera Technologies, Inc., a Delaware corporation. Any capitalized terms used in this Assignment but not defined shall have the same meaning as ascribed thereto in the Purchase Agreement.

WHEREAS, pursuant to the Purchase Agreement, Seller has agreed to cause Assignor to assign to Assignee the Transferred Patents owned by Assignor (the "Assigned Patents"); and

WHEREAS, to effect the transfer of the Assigned Patents as contemplated in the Purchase Agreement, Assignor and Assignee desire to enter into this Assignment.

NOW, THEREFORE, in consideration of the mutual promises of the Parties, and for good and valuable consideration, the receipt, adequacy and legal sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

- 1. Assignor does hereby sell, assign, convey, transfer and deliver to Assignment. Assignee and its successors and assigns, all of the worldwide right, title, and interest of Assignor in and to the patents and patent applications (including any patent applications resulting from invention disclosures) comprising the Transferred Patents listed on Exhibit A (including all members of the Patent Family of such Patents that may not be listed on Exhibit A and any patents resulting from the invention disclosure listed on Exhibit A) and the inventions disclosed therein, not only in the United States and its territorial possessions, but in all countries foreign thereto to be obtained for the subject matter thereof, and to any continuation, continuation-in-part, division, renewal, extension, substitute, re-examination or reissue thereof or any legal equivalent in the United States or a foreign country for the full term or terms for which the same may be granted, including all causes of actions, claims and demands or other rights for, or arising from, any infringement, including past infringement, all rights of priority (including the right to claim the priority date of any of the Transferred Patents) under any international conventions and any other international agreements to which the United States adheres, all income, royalties, damages, claims, including the right to sue, and payments now or hereafter due or payable with respect thereto, and all rights corresponding thereto throughout the world.
- 2. Assistance and Cooperation. Assignor further agrees, without further consideration, to cause to be performed such lawful acts and to execute such further assignments and other lawful documents as Assignee may reasonably request to effectuate fully this Assignment, including but not limited to executing all documents and doing all such acts and things as Assignee may in its absolute discretion consider necessary or desirable to enable letters patent or any other form of protection to be issued in respect of any of said Assigned Patents and the inventions disclosed therein in any part of the world and to vest the same in the name of Assignee; provided that Assignor's obligation hereunder shall be limited at all times to obtaining the cooperation, if needed, of then current employees at such employee's place of employment.

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- 3. <u>Perfection and Recordation</u>. Assignor shall prepare all paperwork that is necessary to perfect and record the assignments of the Assigned Patents in the various jurisdictions, and Assignor shall be responsible for all expenses, including recordation expenses, associated therewith (but excluding any costs incurred by Assignee in the preparation or review of such paperwork).
- 4. <u>Conflicts.</u> Notwithstanding any other provisions of this Assignment to the contrary, each of Assignee and Assignor acknowledges and agrees that the representations, warranties, covenants, agreements, conditions, indemnities, rights and remedies contained in the Purchase Agreement shall not be superseded, modified, replaced, amended, changed, rescinded, or in any way affected hereby, but shall remain in full force and effect to the full extent provided in the Purchase Agreement. This Assignment is subject to and controlled by the terms of the Purchase Agreement, and in the event of any conflict or inconsistency between the terms of the Purchase Agreement and the terms hereof, the terms of the Purchase Agreement shall govern.
- 5. <u>Further Actions</u>. Assignor covenants and agrees, at its own expense, to execute and deliver, at the request of Assignee, such further instruments of transfer and assignment and to take such other actions as reasonably requested by Assignee to more effectively consummate the assignments and assumptions contemplated by this Assignment; provided that after the date hereof, Assignor's obligation hereunder shall be limited at all times to obtaining the cooperation, if needed, of then current employees at such employee's place of employment to effectuate such transfer and assignment.
- 6. <u>Governing Law</u>. This Assignment and any disputes hereunder shall be governed by and construed in accordance with the domestic laws of the State of California, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of California or any other jurisdiction) that would cause the application of laws of any jurisdiction other than those of the State of California.
- 7. Notices. All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given when delivered in person, by telecopy with answer back, by express or overnight mail delivered by a nationally recognized air courier (delivery charges prepaid), by registered or certified mail (postage prepaid, return receipt requested) or by e-mail with receipt confirmed by return e-mail to the respective Parties as set forth below, or such other address as set forth in Purchase Agreement, in the same manner, by such Party. Any notice or communication delivered in person shall be deemed effective on delivery. Any notice or communication sent by e-mail, telecopy or by air courier shall be deemed effective on the first business day following the day on which such notice or communication was sent. Any notice or communication sent by registered or certified mail shall be deemed effective on the third business day following the day on which such notice or communication was mailed.
- 8. <u>Binding Assignment</u>. No Party may, directly or indirectly, in whole or in part, whether voluntarily or involuntarily or by operation of law or otherwise, assign or transfer this Assignment and the rights granted to it hereunder without the other Party's prior written consent, which consent may be granted or refused at the other Party's sole discretion. Notwithstanding the foregoing, either Party may assign this Assignment and the rights granted to it hereunder, subject to its obligations, to a successor in interest without the consent of the other Party upon any merger, acquisition, reorganization, change of control, or sale of all or substantially all of the assets or business of such Party or the sale of all or substantially all of the camera module assets or the business. Any assignment or attempted assignment in violation of this Section shall be null and void from the beginning, and shall be deemed a material breach of this Assignment.

- 9. <u>Relationship Between Parties.</u> Assignee and Assignor shall at all times and for all purposes be deemed to be independent contractors and neither Party, nor either Party's employees, representatives, subcontractors or agents, shall have the right or power to bind the other Party. This Assignment shall not itself create or be deemed to create a joint venture, partnership or similar association between Assignee and Assignor or either Party's employees, representatives, subcontractors or agents.
- 10. Third Party Beneficiaries. The terms and provisions of this Assignment are intended solely for the benefit of Assignee and its Affiliates, on the one hand, and Assignor and its Affiliates, on the other hand. It is not the intention of the Parties to confer third-party beneficiary rights upon any other person or entity, and this Assignment does not (shall not be construed to) confer any right or cause of action in, upon or on behalf of any other person or entity, and no person or entity (including any of employee or former employee of any of the Parties) other than Assignee or its Affiliates and Assignor or its Affiliates shall be entitled to rely on any provision of this Assignment in any action proceeding, hearing or other forum.
- 11. <u>Severability</u>. In the event that any clause, sub-clause or other provision contained in this Assignment shall be determined by any competent authority to be invalid, unlawful or unenforceable to any extent, such clause, sub-clause or other provision shall to that extent be severed from the remaining clauses and provisions, or the remaining part of the clause in question, which shall continue to be valid and enforceable to the fullest extent permitted by law.
- 12. <u>No Waiver: Remedies Cumulative</u>. Failure or neglect by a Party to enforce at any time any of the provisions hereof shall not be construed nor shall be deemed to be a waiver of such Party's rights hereunder nor in any way affect the validity of the whole or any part of this Assignment nor prejudice such Party's rights to take subsequent action. All rights and remedies conferred under this Assignment or by any other instrument or law shall be cumulative and may be exercised singularly or concurrently.
- 13. <u>Amendment</u>. Any term of this Assignment may be amended, modified, rescinded, canceled or waived, in whole or in part, only by a written instrument signed by each of the Parties' authorized representatives or their respective permitted successors and assigns. Any amendment or waiver effected in accordance with this Section shall be binding upon the Parties and their respective successors and assigns.
- 14. <u>Counterparts</u>. This Assignment may be executed in two or more counterparts, all of which, taken together, shall be considered to be one and the same instrument.
- 15. <u>Headings</u>; <u>Construction</u>. The headings to the clauses, sub-clauses and parts of this Assignment are inserted for convenience of reference only and are not intended to be part of or to affect the meaning or interpretation of this Assignment. The terms "this Assignment," "hereof," "hereunder" and any similar expressions refer to this Assignment and not to any particular Section or other portion hereof. The Parties agree that any rule of construction to the effect that ambiguities are to be resolved against the drafting Party will not be applied in the construction or interpretation of this Assignment. As used in this Assignment, the words "include" and "including," and variations thereof, will be deemed to be followed by the words "without limitation" and "discretion" means sole discretion.

16. <u>Entire Assignment</u>. With the exception of the Purchase Agreement and the Ancillary Agreements, this Assignment supersedes any arrangements, understandings, promises or agreements made or existing between the Parties prior to or simultaneously with this Assignment and, together with the Purchase Agreement and the Ancillary Agreements, constitutes the entire understanding between the Parties.

[Signature Page Follows]

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IN WITNESS WHEREOF, Assignor has caused this Assignment to be executed as of the Effective Date.

Name: Title:

FLEXTRONICS AP, LLC

ACKNOWLEDGEMENT:	
STATE OF CALIFORNIA	
COUNTY OF)	3 ss:
On before	
	who proved to me on the basis of satisfactory evidence to be
the person(s) whose name(s) is/are sn	bscribed to the within instrument and acknowledged to me that
- · · · · · · · · · · · · · · · · · · ·	,
	her/their authorized capacity(ies), and that by his/her/their
signature(s) on the instrument the per-	son(s), or the entity upon behalf of which the person(s) acted,
executed the instrument.	
Landiformaton DENIAL TV OF DEDICE	INV under the large of the State of California that the foresing
*	JRY under the laws of the State of California that the foregoing
paragraph is true and correct.	
WITNESS my hand and official seal.	
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State of California			
County of <u>Santa</u> <u>Cla</u>	ra)	
On <u>UZUZOZ</u> before	me, Gina I	Here Insert Name and Title of the Officer Name(s) of Signer(s)	<u>110</u>
personally appeared	311770	7 Name(s) of Signer(s)	
GINA SARRERAS Commission # 18275 Natery Public - Califor Sama Clare County M. Comm. Expliss Dec 20 Place Notary Seal Above Though the information below is not and could prevent found	e si to to h h h p p p l l l l l l l l l l l l l l	who proved to me on the basis of evidence to be the person(s) whose name ubscribed to the within instrument and ack or me that he/she/they executed the is/her/their authorized capacity(ies), ar is/her/their signature(s) on the instrument of serson(s), or the entity upon behalf of the instrument. Certify under PENALTY OF PERJURY aws of the State of California that the the transparable is true and correct. WITNESS my hand and official seal. Signature: Signature: Signature of Notary Public of the document of this form to another document.	ne(s) is/are nowledged same in that but the which the under the foregoing
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Title or Type of Document:			·
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Signer's Name: Corporate Officer — Title(s): Individual Partner — Limited General Attorney in Fact Trustee	RIGHT THUMBPHINT OF SIGNER	☐ Individual ☐ Partner — ☐ Limited ☐ General ☐ Attorney in Fact ☐ Trustee	of thumb here
Signer's Name: Corporate Officer — Title(s): Individual Partner — Limited General Attorney in Fact Trustee Guardian or Conservator	RIGHT THUMBPHINT OF SIGNER	☐ Individual ☐ Partner — ☐ Limited ☐ General ☐ Attorney in Fact ☐ Trustee ☐ Guardian or Conservator	of thumb here
Signer's Name:	RIGHT THUMBPHINT OF SIGNER	☐ Individual ☐ Partner — ☐ Limited ☐ General ☐ Attorney in Fact ☐ Trustee ☐ Guardian or Conservator ☐ Other:	of thumb here
Signer's Name: Corporate Officer — Title(s): Individual Partner — Limited General Attorney in Fact Trustee Guardian or Conservator	RIGHT THUMBPHINT OF SIGNER	☐ Individual ☐ Partner — ☐ Limited ☐ General ☐ Attorney in Fact ☐ Trustee ☐ Guardian or Conservator	of thumb here

Exhibit A Assigned Patents

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Jurisdiction	Title	Application No.	Publication No.	Patent No.	Filing Date	Issue Date
CN	ACTUATED STEPPER LENS CAMERA MODULE	200780049919.8	101595429		12/3/2007	
JP	ACTUATED STEPPER LENS CAMERA MODULE	2009-539371	2010511897		12/3/2007	
US	ACTUATED STEPPER LENS CAMERA MODULE	11/998,992	20080225415	ļ	12/3/2007	
US	ACTUATED STEPPER LENS CAMERA MODULE	60/872,142	ļ	 	12/1/2006	
WO	ACTUATED STEPPER LENS CAMERA MODULE	PCT/US07/024923	2008070125	ļ	12/3/2007	.
US	AF/ZOOM SHUTTER WITH TWO BLADES FUNCTION	12/624,266	20110052183	8083421	11/23/2009	12/27/2011
US	ALTERNATIVE PROCESS TO SHELLCASE CF STYLE PACKAGING				.	
US	ATTACHING PASSIVE COMPONENTS TO A SEMICONDUCTOR DIE	60/891,655	ļ		2/26/2007	
wo	ATTACHING PASSIVE COMPONENTS TO A SEMICONDUCTOR DIE	PCT/US07/088949	2008105979		12/27/2007	
CN	ATTACHMENT OF WAFER LEVEL OPTICS	200980111373.3	101981913		2/19/2009	<u> </u>
JP	ATTACHMENT OF WAFER LEVEL OPTICS	2010-547748	2011-514054		2/19/2009	
US	ATTACHMENT OF WAFER LEVEL OPTICS	12/368,454	20090213262		2/10/2009	
us	ATTACHMENT OF WAFER LEVEL OPTICS	61/030,937			2/22/2008	
wo	ATTACHMENT OF WAFER LEVEL OPTICS	PCT/US09/034528	2009105547		2/19/2009	<u> </u>
JP 91	AUTO FOCUS/ ZOOM MODULES USING WAFER LEVEL OPTICS	2010-506259	2010525413		4/24/2008	
wo	AUTO FOCUS/ ZOOM MODULES USING WAFER LEVEL OPTICS	PCT/US08/005298	2008133946		4/24/2008	
CA	AUTO FOCUS/ZOOM MODULES USING WAFER LEVEL OPTICS	2685083	2685083		4/24/2008	ļ
US	AUTO FOCUS/ZOOM MODULES USING WAFER LEVEL OPTICS	12/150,119	20090015706		4/24/2008	
US	AUTO FOCUS/ZOOM MODULES USING WAFER LEVEL OPTICS	60/925,947			4/24/2007	
	AUTO FOCUS-ZOOM ACTUATOR OR CAMERA MODULE CONTAMINATION	13/046 563				
US	REDUCTION FEATURE WITH INTEGRATED PROTECTIVE MEMBRANE	13/046,563		<u> </u>	3/11/2011	
CA	AUTO-FOCUS AND ZOOM MODULE	2620842	2620842		9/5/2006	3/15/2007
CN	AUTO-FOCUS AND ZOOM MODULE	200680041383	101300525		9/5/2006	
EP	AUTO-FOCUS AND ZOOM MODULE	6814261.1	1929364		9/5/2006	
JP	AUTO-FOCUS AND ZOOM MODULE	2008-530180	2009516857		9/5/2006	
KR	AUTO-FOCUS AND ZOOM MODULE	10-2008-7005469	1020087005469		3/5/2008	
TW	AUTO-FOCUS AND ZOOM MODULE	95132640	200712721	1	9/4/2006	
wo	AUTO-FOCUS AND ZOOM MODULE	PCT/US06/034792	2007030578	1	9/5/2006	
	AUTO-FOCUS AND ZOOM MODULE HAVING A LEAD SCREW WITH ITS ROTATION			1	1	
υs	RESULTS IN TRANSLATION OF AN OPTICS GROUP	11/514,811	20070053672	7531773	9/1/2006	5/12/2009
	AUTO-FOCUS AND ZOOM MODULE WITH VIBRATIONAL ACTUATOR AND POSITION				 	
US	SENSING METHOD	11/893,940	20080068728	7580209	8/17/2007	8/25/2009
	AUTO-FOCUS AND ZOOM MODULE WITH VIBRATIONAL ACTUATOR AND POSITION		1		 	
US	SENSING METHOD	12/287,469	20090046376	7623301	10/8/2008	11/24/2009
0.5	AUTO-FOCUS AND ZOOM MODULE WITH VIBRATIONAL ACTUATOR AND POSITION			-	 	
us	SENSING METHOD	60/844,781			9/15/2006	
03					-	<u> </u>
wo	AUTO-FOCUS AND ZOOM MODULE WITH VIBRATIONAL ACTUATOR AND POSITION	PCT/US07/019933	2008033467	1	9/11/2007	
wo	SENSING METHOD					
Ltc	AUTOFOCUS CAMERA MODULE PACKAGING WITH CIRCUITRY-INTEGRATED	13/404,838			2/24/2012	
US	ACTUATOR SYSTEM					
	AUTOFOCUS CAMERA MODULE PACKAGING WITH CIRCUITRY-INTEGRATED	61/446,156			2/24/2011	
US	ACTUATOR SYSTEM				ļ	
	AUTOFOCUS-ZOOM CAMERA MODULE INTEGRATING LCD MODULE AS HIGH SPEED	13/404,528			2/24/2012	
US	SHUTTER				ļ. ·	
	AUTOFOCUS-ZOOM CAMERA MODULE INTEGRATING LCD MODULE AS HIGH SPEED	61/446,151			2/24/2011	
US	SHUTTER				ļ	
CN	AUTOMATIC FOCUS/ZOOM MODULES USING WAFER LEVEL OPTICAL SYSTEMS	200880021357	101681085		4/24/2008	
CN	AUTOMATIC FOCUSING/ZOOM SHUTTER WITH TWO BLADES FUNCTION	201010560305.X	1020181276	ļ	4/25/2008	
US	BACKLASH PREVENTION SYSTEM AND METHOD	12/317,132	20090167926	8018528	12/18/2008	9/13/2011
US	CALIBRATION TECHNIQUES FOR CAMERA MODULE	61/156,692			3/2/2009	
wo	CALIBRATION TECHNIQUES FOR CAMERA MODULE	PCT/US10/025958	2010101945		3/2/2010	
CN	CALIBRATION TECHNIQUES FOR CAMERA MODULES	201080010237	102342089		3/2/2010	
US	CALIBRATION TECHNIQUES FOR CAMERA MODULES	12/716,128	20100321506		3/2/2010	
CN	CAMERA BLADE SHUTTER MODULE	200880014884.9	101675381		4/25/2008	
JP	CAMERA BLADE SHUTTER MODULE	2010-507395	2010527030		4/25/2008	
JР	CAMERA BLADE SHUTTER MODULE	2010-507415	2010535348		4/30/2008	
TW	CAMERA BLADE SHUTTER MODULE	97115801	200903143		4/29/2008	
US	CAMERA BLADE SHUTTER MODULE	12/150,219	20080279544	7798730	4/25/2008	9/21/2010
wo	CAMERA BLADE SHUTTER MODULE	PCT/US08/005405	2008136947		4/25/2008	1
	CAMERA MODULE BACK-FOCAL LENGTH ADJUSTMENT METHOD AND ULTRA				1	
CN	COMPACT COMPONENTS PACKAGING	200880023704.3	101689012	1	7/15/2008	1
	CAMERA MODULE BACK-FOCAL LENGTH ADJUSTMENT METHOD AND ULTRA				1	1
JP	COMPACT COMPONENTS PACKAGING	2010-517011	2011503635		7/15/2008	
	CAMERA MODULE BACK-FOCAL LENGTH ADJUSTMENT METHOD AND ULTRA	_	1		1	
US	COMPACT COMPONENTS PACKAGING	13/149,638	20110228154		5/31/2011	1
	CAMERA MODULE BACK-FOCAL LENGTH ADJUSTMENT METHOD AND ULTRA					l
US	COMPACT COMPONENTS PACKAGING	11/980,021	20090021624	7825985	10/29/2007	
	CAMERA MODULE BACK-FOCAL LENGTH ADJUSTMENT METHOD AND ULTRA					†
HS	COMPACT COMPONENTS PACKAGING	12/873,995	20100325883		9/1/2010	
US			 		 	
110	CAMERA MODULE BACK-FOCAL LENGTH ADJUSTMENT METHOD AND ULTRA	60/961,312			7/19/2007	
US	COMPACT COMPONENTS PACKAGING				<u> </u>	
	CAMERA MODULE BACK-FOCAL LENGTH ADJUSTMENT METHOD AND ULTRA	PCT/US08/008708	2009014627		7/15/2008	
				ſ	1,	I
wo	COMPACT COMPONENTS PACKAGING					
JP.	CAMERA MODULE CONTAMINATION REDUCTION GASKET	2009-535360	2010509806		11/5/2007	
	CAMERA MODULE CONTAMINATION REDUCTION GASKET CAMERA MODULE CONTAMINATION REDUCTION GASKET	2009-535360 11/982,846 PCT/US07/023388	2010509806 20080159734 2008057544	7773876	11/5/2007 11/5/2007 11/5/2007	

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	CAMERA MODULE INCLUDING PASSIVE COMPONENT ALIGNMENT SYSTEM AND					
US	METHOD OF MANUFACTURE		ļ			
CN	CAMERA MODULE WITH CONTAMINATION REDUCTION FEATURE	200780040705.4	101535861	<u> </u>	11/5/2007	
JP	CAMERA MODULE WITH CONTAMINATION REDUCTION FEATURE CAMERA MODULE WITH CONTAMINATION REDUCTION FEATURE	200780041066.3 2009-535355	101543045 2010509620		11/5/2007	
US	CAMERA MODULE WITH CONTAMINATION REDUCTION FEATURE	11/982,726	2010303020	7983556	11/2/2007	
US	CAMERA MODULE WITH CONTAMINATION REDUCTION FEATURE	60/864,348	20000132333	7383330	11/2/2007	
wo	CAMERA MODULE WITH CONTAMINATION REDUCTION FEATURE	PCT/US07/023335	2008057517		11/5/2007	
US	CAMERA MODULE WITH FOLD OVER FLEXIBLE CIRCUIT AND CAVITY SUBSTRATE	12/590,325	20110102667		11/5/2009	
wo	CAMERA MODULE WITH FOLD-OVER FLEXIBLE CIRCUIT AND CAVITY SUBSTRATE	PCT/US10/002913	2011056228		11/5/2010	
US	CAMERA MODULE WITH PROTECTIVE AIR VENTILATION CHANNEL	13/413,202			3/6/2012	
US	CAMERA MODULE WITH PROTECTIVE AIR VENTILATION CHANNEL	61/450,040			3/7/2011	
CN	CAMERA MODULE WITH TEMPORARY LOCK STRUCTURE SECTION	201110063877.1	102109652		11/5/2007	
US	CAMERA MODULE WITH THREADLESS LENS BARREL ENGAGEMENT DESIGN	13/470,098			5/11/2012	
US	CAMERA MODULE WITH THREADLESS LENS BARREL ENGAGEMENT DESIGN	61/485,276			5/11/2012	
US	COMBINATION MIRROR-DUST PROTECTOR SHUTTER FOR A 3X ZOOM CAMERA					
US	DEVICE AND METHOD FOR ASSEMBLING CAMERA MODULES					
CN	DUAL LENS DIGITAL ZOOM	201010000000	101902572		5/4/2010	
JP	DUAL LENS DIGITAL ZOOM	2010-081264	2010263619		3/31/2010	
US	DUAL LENS DIGITAL ZOOM	12/435,080	20100277619		5/4/2009	
US	DUAL SENSOR CAMERA	12/727,973	20100238327		3/19/2010	
US	DUAL SENSOR CAMERA	61/161,621			3/19/2009	
wo	DUAL SENSOR CAMERA	PCT/US10/28014	2010108119		3/19/2010	
US	ELECTRONIC COMPONENT STRUCTURE AND METHOD OF MAKING	11/752,181	20080206927	7867806	5/22/2007	1/11/2011
us	FLASH SYSTEM FOR CAMERA MODULE	13/404,512			2/24/2012	
US	FLASH SYSTEM FOR CAMERA MODULE	61/446,113			2/24/2011	
US	FLIP-CHIP CAMERA MODULE AND METHOD OF MANUFACTURE					
US	GLASS-ON-DIE ATTACHMENT METHOD FOR IMAGE SENSOR	12/136,033			6/9/2008	
US	GLASS-ON-DIE ATTACHMENT METHOD FOR IMAGE SENSOR	60/942,953			6/8/2007	
CN	IMAGE SPACE FOCUS	201010209726.8	101877763		4/29/2010	
JP	IMAGE SPACE FOCUS	2010-104944	2010262293		4/30/2010	
US	IMAGE SPACE FOCUS	12/432,590	20100277638		4/29/2009	
US	INTEGRATED CAMERA MODULE AND METHOD OF MANUFACTURE		ļ			
US	LASER BONDING CAMERA MODULES TO LOCK FOCUS	11/874,794	20090103193	7830624	10/18/2007	11/9/2010
us	LENS HOUSING WITH INTEGRATED IR FILTER					
US	LENS MOUNTED IMAGE CAPTURE DEVICE AND METHOD OF MANUFACTURE					
	LENS TO HOUSING ATTACHMENT DESIGN TO REDUCE SENSOR CONTAMINATION					
US	AND ALLOW LENS FOCUSING ALONG WITH ITS TILT AND TIP ALIGNMENT			ļ		
us	LOW PROFILE CAMERA MODULE PACKAGING	13/403,610			2/23/2012	
US	LOW PROFILE CAMERA MODULE PACKAGING	61/446,163	ļ		2/24/2011	
TW	MANUFACTURABLE MICROPOSITIONING SYSTEM	96128928	200813594		8/6/2007	
US	MANUFACTURABLE MICROPOSITIONING SYSTEM EMPLOYING SENSOR TARGET	11/888,939	20080040069	7590505	8/3/2007	9/15/2009
	MANUFACTURABLE MICROPOSITIONING SYSTEM EMPLYOYING NON-LINEAR	200780037571	101548278		8/7/2007	
CN	ACTUATOR				ļ	l
	MANUFACTURABLE MICROPOSITIONING SYSTEM EMPLYOYING NON-LINEAR	PCT/US07/017696	2008021167		8/7/2007	
wo	ACTUATOR					
116	METHOD AND STRUCTURE FOR INTERCONNECTING MULTIPLE DIES IN A CAMERA		1			
US	MODULE					
l	METHOD FOR ALIGNING AND ASSEMBLING TWO LENS PIECES, AND A MACHINE TO	6788884.2	1924954		7/28/2006	
EP	ACCOMPLISH THIS TASK					
	METHOD FOR ALIGNING AND ASSEMBLING TWO LENS PIECES, AND A MACHINE TO	11/494,859	20070032169	7715129	7/28/2006	5/11/2010
US	ACCOMPLISH THIS TASK					
115	METHOD FOR ALIGNING AND ASSEMBLING TWO LENS PIECES, AND A MACHINE TO	60/703,539		1	7/29/2005	
US	ACCOMPLISH THIS TASK		-	-	 	
luc .	METHOD FOR ALIGNING AND ASSEMBLING TWO LENS PIECES, AND A MACHINE TO	60/703,531			7/29/2005	
US	ACCOMPLISH THIS TASK		 	 	 	
wo	METHOD FOR ALIGNING AND ASSEMBLING TWO LENS PIECES, AND A MACHINE TO ACCOMPLISH THIS TASK	PCT/US06/029572	2007016413	1	7/28/2006	
WO				<u> </u>		
EΡ	METHOD OF ALIGNING THE UPPER AND LOWER CENTERING BELLS OF A LENS DOUBLET ASSEMBLY MACHINE	6813247.1	1924875	1	7/28/2006	
r.	METHOD OF ALIGNING THE UPPER AND LOWER CENTERING BELLS OF A LENS		 	 		
us	METHOD OF ALIGNING THE OPPER AND LOWER CENTERING BELLS OF A LENS DOUBLET ASSEMBLY MACHINE	11/495,330	20070037485	7508606	7/28/2006	3/24/2009
03	METHOD OF ALIGNING THE UPPER AND LOWER CENTERING BELLS OF A LENS		<u> </u>	1	 	
lwo.		PCT/US06/029573	2007016414	1	7/28/2006	
wo us	DOUBLET ASSEMBLY MACHINE METHOD OF MOLDING AN OPTICAL LENS USING A CAM ACTION PROCESS				 	
EP	MICRO CAMERA MODULE WITH DISCRETE MANUAL FOCAL POSITIONS	6803508.8	1946184	 	9/14/2006	
JP	MICRO CAMERA MODULE WITH DISCRETE MANUAL FOCAL POSITIONS MICRO CAMERA MODULE WITH DISCRETE MANUAL FOCAL POSITIONS	2008-533403	2009510519		9/14/2006	
US	MICRO CAMERA MODULE WITH DISCRETE MANUAL FOCAL POSITIONS MICRO CAMERA MODULE WITH DISCRETE MANUAL FOCAL POSITIONS	11/242,646	20070077051	7469100	10/3/2005	12/23/2008
US	MICRO CAMERA MODULE WITH DISCRETE MANUAL FOCAL POSITIONS MICRO CAMERA MODULE WITH DISCRETE MANUAL FOCAL POSITIONS	12/317,295	20090110385	7873269	12/22/2008	1/18/2011
US	MICRO CAMERA MODULE WITH DISCRETE MANUAL FOCAL POSITIONS MICRO CAMERA MODULE WITH DISCRETE MANUAL FOCAL POSITIONS	12/930,799	20110116779	.313203	1/18/2011	1/18/2011
WO	MICRO CAMERA MODULE WITH DISCRETE MANUAL FOCAL POSITIONS MICRO CAMERA MODULE WITH DISCRETE MANUAL FOCAL POSITIONS	PCT/US06/035660	2010116779		9/14/2006	2, 10, 2011
CN	MINIATURE CAMERA SHUTTER AND FILTER/APERTURE	200880014860.3	101675382		4/30/2008	
JP	MINIATURE CAMERA SHUTTER AND FILTER/APERTURE	2010-507415	JP2010535348	†	4/30/2008	
TW	MINIATURE CAMERA SHOTTER AND FILTER/APERTURE	97116131	200903144		5/1/2008	
US	MINIATURE CAMERA SHUTTER AND FILTER/APERTURE	60/928,135	20000144	l	5/7/2007	
US	MINIATURE CAMERA SHUTTER AND FILTER/APERTURE	12/150,874	20080279545	7806606	4/30/2008	10/5/2010
WO	MINIATURE CAMERA SHUTTER AND FILTER/APERTURE	PCT/US08/005659	20080279343		4/30/2008	20, 2, 2010
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	US	MULTI-DIRECTION SFR MEASUREMENT SYSTEM	13/476,420			5/21/2012	
10 OPTICAL MAYOSCROPECON 1772/2009	CN	OPTICAL NAVIGATION DEVICE	201010505078	102073391		10/9/2010	
Part	JP	OPTICAL NAVIGATION DEVICE	2010-190783	2011113560		8/27/2010	
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