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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	
		Filing Date	2023-07-13
		First Named Inventor	KARTALOV EMIL; P.
		Art Unit	
		Examiner Name	Not yet assigned
		Attorney Docket Number	88DG-373535-US
Sheet	1	of	27

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	001	US-5079351	01-07-1992	SNINSKY; John J. et al.	
	002	US-5538848	07-23-1996	LIVAK; Kenneth J. et al.	
	003	US-5618711	04-08-1997	GELFAND; David H. et al.	
	004	US-5677152	10-14-1997	BIRCH; David Edward et al.	
	005	US-5723591	03-03-1998	LIVAK; Kenneth J. et al.	
	006	US-5773258	06-30-1998	BIRCH; David Edward et al.	
	007	US-5789224	08-04-1998	GELFAND; David H. [Us] et al.	
	008	US-5804375	09-08-1998	GELFAND; David H. et al.	
	009	US-5834203	11-10-1998	KATZIR; Nir et al.	
	010	US-5876930	03-02-1999	LIVAK; Kenneth J. et al.	
	011	US-5882856	03-16-1999	SHUBER; Anthony P.	
	012	US-5928862	07-27-1999	MORRISON; Larry E.	
	013	US-5948360	09-07-1999	RAO; Prabhakar P. et al.	
	014	US-5981180	11-09-1999	CHANDLER; Van S. et al.	
	015	US-5994056	11-30-1999	HIGUCHI; Russell G.	
	016	US-6030787	02-29-2000	LIVAK; Kenneth J. et al.	
	017	US-6103463	08-15-2000	CHETVERIN; Alexander B. et al.	
	018	US-6127155	10-03-2000	GELFAND; David H. et al.	
	019	US-6171785	01-09-2001	HIGUCHI; Russell G.	
	020	US-6258569	07-10-2001	LIVAK; Kenneth J. et al.	
	021	US-6534266	03-18-2003	SINGER; Robert H.	

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		Number-Kind Code ² (if known)			
	022	US-6534274	03-18-2003	BECKER; Michael M. et al.	
	023	US-6548259	04-15-2003	WARD; David C. et al.	
	024	US-6642062	11-04-2003	KAUVAR; Lawrence M. et al.	
	025	US-6893875	05-17-2005	TSUJI; Yasuhiro et al.	
	026	US-7101663	09-05-2006	GODFREY; Tony E. et al.	
	027	US-7141377	11-28-2006	GELFAND; David H. et al.	
	028	US-7348141	03-25-2008	FRENCH; David John et al.	
	029	US-7385043	06-10-2008	KRAMER; Fred R.	
	030	US-7410764	08-12-2008	GOCKE; Christopher et al.	
	031	US-7413708	08-19-2008	MAYRAND; Paul E.	
	032	US-7473767	01-06-2009	DIMITROV; Krassen	
	033	US-7507575	03-24-2009	BEDINGHAM; William [Us] et al.	
	034	US-7575864	08-18-2009	BEDZYK; Laura A. et al.	
	035	US-7667024	02-23-2010	MAO; FEI et al.	
	036	US-7671184	03-02-2010	HAENER; Robert et al.	
	037	US-7709249	05-04-2010	BEDINGHAM; William et al.	
	038	US-7767423	08-03-2010	KOPRESKI; Michael [Us] et al.	
	039	US-7771949	08-10-2010	KRAMER; Fred R.	
	040	US-7919237	04-05-2011	DIMITROV; Krassen et al.	
	041	US-7919244	04-05-2011	MADEJON; Seiz Antonio et al.	

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		Number-Kind Code ² (if known)			
	042	US-7930106	04-19-2011	CARRICK; James M. [Us] et al.	
	043	US-7941279	05-10-2011	HWANG; Jenq-Neng et al.	
	044	US-8039215	10-18-2011	HIGUCHI; Russell [Us] et al.	
	045	US-8148512	04-03-2012	DIMITROV; Krassen et al.	
	046	US-8426132	04-23-2013	LI; BIN [Us] et al.	
	047	US-8455184	06-04-2013	ATCHLEY; Daniel H. [Us] et al.	
	048	US-8492094	07-23-2013	DIMITROV; Krassen [Us] et al.	
	049	US-8519115	08-27-2013	WEBSTER; Philippa J. [Us] et al.	
	050	US-8614061	12-24-2013	BRABETZ; Werner [De] et al.	
	051	US-8771955	07-08-2014	REED; Michael W. [Us] et al.	
	052	US-8838394	09-16-2014	KARTALOV; Emil [Us] et al.	
	053	US-8877464	11-04-2014	BABIEL; Reiner [De] et al.	
	054	US-8962250	02-24-2015	STANLEY; Keith [Au] et al.	
	055	US-9133506	09-15-2015	KATZIR; NIR [Il] et al.	
	056	US-9222128	12-29-2015	SAXONOV; Serge et al.	
	057	US-9260761	02-16-2016	TYAGI; Sanjay [Us] et al.	
	058	US-9366632	06-14-2016	LINK; Darren R. et al.	
	059	US-9422593	08-23-2016	ROTHMANN; Thomas [De] et al.	
	060	US-9441266	09-13-2016	LARSON; Jonathan William et al.	

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		Number-Kind Code ² (if known)			
	061	US-9447457	09-20-2016	CHUN; Jong Yoon [Kr] et al.	
	062	US-9458497	10-04-2016	HASSIBI; Arjang et al.	
	063	US-9791372	10-17-2017	MALIK; Imran R. et al.	
	064	US-10066263	09-04-2018	RAJAGOPAL; Aditya et al.	
	065	US-10068051	09-04-2018	KARTALOV; Emil et al.	
	066	US-10068051	09-04-2018	KARTALOV; Emil et al.	
	067	US-10301668	05-28-2019	JACKY; Lucian A.E.	
	068	US-10770170	09-08-2020	KARTALOV; Emil P. et al.	
	069	US-20020022273	02-21-2002	EMPEDOCLES; Stephen A. [Us] et al.	
	070	US-20020146734	10-10-2002	ORTYN; William E. et al.	
	071	US-20030134320	07-17-2003	BARRUS; Jeffrey K. et al.	
	072	US-20030148280	08-07-2003	HARRIS; Barbara J. et al.	
	073	US-20030148544	08-07-2003	NIE; Shuming et al.	
	074	US-20040053230	03-18-2004	SCHAFFER; Michael Edward [Us] et al.	
	075	US-20040191794	09-30-2004	WEINDEL; Kurt et al.	
	076	US-20050053950	03-10-2005	ZUDAIRE UBANI; Enrique et al.	
	077	US-20050064435	03-24-2005	SU; Xing et al.	
	078	US-20050106607	05-19-2005	YIN; Li-Te et al.	
	079	US-20050164264	07-28-2005	SHIPWASH; Edward	
	080	US-20050214753	09-29-2005	SHULTZ; John W. et al.	

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	081	US-20050250146	11-10-2005	MCMILLAN; William A.	
	082	US-20050260640	11-24-2005	ANDERSEN; Mark R. et al.	
	083	US-20060216708	09-28-2006	VENEMA; Fokke	
	084	US-20070072211	03-29-2007	NEWTON; Nick et al.	
	085	US-20070178485	08-02-2007	EL-DEIRY; Wafik S. et al.	
	086	US-20070231824	10-04-2007	CHEE; Mark S. et al.	
	087	US-20080050737	02-28-2008	ARIELI; Boaz et al.	
	088	US-20080069733	03-20-2008	MALTEZOS; George et al.	
	089	US-20080096767	04-24-2008	KOHN; Heinz G.	
	090	US-20080124705	05-29-2008	KRAMER; Fred R.	
	091	US-20090042735	02-12-2009	BLAIR; Steven M. et al.	
	092	US-20090048785	02-19-2009	KATZIR; NIR et al.	
	093	US-20090062129	03-05-2009	MCKERNAN; Kevin [Us] et al.	
	094	US-20100015607	01-21-2010	GEISS; Gary K. et al.	
	095	US-20100041092	02-18-2010	LIN; Michael Z. et al.	
	096	US-20100047924	02-25-2010	WEBSTER; Philippa J. et al.	
	097	US-20100112710	05-06-2010	GEISS; Gary K. et al.	
	098	US-20100120043	05-13-2010	SOOD; Anup et al.	
	099	US-20100151443	06-17-2010	XIANG; Qing et al.	
	100	US-20100159447	06-24-2010	LI; BIN et al.	
	101	US-20100210472	08-19-2010	EMPEDOCLES; Stephen A. et al.	

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	102	US-20100233686	09-16-2010	HIGUCHI; Russell et al.	
	103	US-20100248257	09-30-2010	JACOBSEN; Kivin et al.	
	104	US-20100261026	10-14-2010	FERREE; Sean M. et al.	
	105	US-20100267064	10-21-2010	KARTALOV; Emil P. et al.	
	106	US-20100273173	10-28-2010	HIRAI; Mitsuharu et al.	
	107	US-20100324834	12-23-2010	TREPTOW; Rainer [De] et al.	
	108	US-20110104684	05-05-2011	HOOPER; Dennis G.	
	109	US-20110151459	06-23-2011	ROTHMANN; Thomas et al.	
	110	US-20110151550	06-23-2011	SAGNER; Gregor et al.	
	111	US-20110171658	07-14-2011	CARRICK; James M.	
	112	US-20110207623	08-25-2011	DIMITROV; Krassen et al.	
	113	US-20110223602	09-15-2011	WHITMAN; Douglas F. [Us] et al.	
	114	US-20110237459	09-29-2011	NOVA; Michael P. et al.	
	115	US-20120003646	01-05-2012	JOO; Sunghae A. et al.	
	116	US-20120040349	02-16-2012	VON; Lode Piia et al.	
	117	US-20120040352	02-16-2012	WANGH; Lawrence J. [Us] et al.	
	118	US-20120045756	02-23-2012	ROTHMANN; Thomas et al.	
	119	US-20120077195	03-29-2012	LI; Qingge et al.	
	120	US-20120101740	04-26-2012	ORPANA; Arto [Se] et al.	
	121	US-20120122704	05-17-2012	ATCHLEY; Daniel H. et al.	

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		Application Number	
		Filing Date	2023-07-13
		First Named Inventor	KARTALOV EMIL; P.
		Art Unit	
		Examiner Name	Not yet assigned
		Attorney Docket Number	88DG-373535-US
Sheet	7	of	27

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	122	US-20120141995	06-07-2012	LI; Qingge et al.	
	123	US-20120171677	07-05-2012	LUDOWISE; Peter D.	
	124	US-20120184017	07-19-2012	CHATTERJEE; DEB K.	
	125	US-20120190030	07-26-2012	CHUN; Jong Yoon et al.	
	126	US-20120196283	08-02-2012	BABIEL; Reiner et al.	
	127	US-20120244534	09-27-2012	CHING; Jesus et al.	
	128	US-20120252014	10-04-2012	LOEFFERT; Dirk et al.	
	129	US-20120252017	10-04-2012	REED; Michael W. et al.	
	130	US-20120258457	10-11-2012	JAROSCH; Florian et al.	
	131	US-20120302448	11-29-2012	HUTCHISON; John Brian et al.	
	132	US-20130017971	01-17-2013	GEISS; Gary K. [Us] et al.	
	133	US-20130040841	02-14-2013	SAXONOV; Serge et al.	
	134	US-20130078626	03-28-2013	WASSERSTROM; Adam et al.	
	135	US-20130116780	05-09-2013	MILLER; Eran et al.	
	136	US-20130261019	10-03-2013	LIN; Chenxiang [Us] et al.	
	137	US-20130288244	10-31-2013	DECIU; Cosmin et al.	
	138	US-20140004520	01-02-2014	MOHAPATRA; Shyam S. et al.	
	139	US-20140038195	02-06-2014	MALIK; Imran R. [Us] et al.	
	140	US-20140171341	06-19-2014	JOUVENOT; Yann et al.	
	141	US-20140213471	07-31-2014	RAJAGOPAL; Aditya et al.	

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Examiner Signature	/RUSSELL S NEGIN/	Date Considered	12/30/2023
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Sheet	8	of	27	Attorney Docket Number	88DG-373535-US

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		Number-Kind Code ² (if known)			
	142	US-20140274774	09-18-2014	LI; Kelly et al.	
	143	US-20150057178	02-26-2015	KARTALOV; Emil et al.	
	144	US-20150140554	05-21-2015	SNYDER; Richard O. et al.	
	145	US-20150211054	07-30-2015	KOSTEM; Emrah et al.	
	146	US-20150275295	10-01-2015	WANG; Linfa et al.	
	147	US-20160040256	02-11-2016	CHEN; Caifu et al.	
	148	US-20160108464	04-21-2016	SAXONOV; Serge et al.	
	149	US-20160201122	07-14-2016	BUSHKIN; Yuri et al.	
	150	US-20160273048	09-22-2016	ROPERCH; Jean-Pierre	
	151	US-20170145490	05-25-2017	CHIU; Daniel T. et al.	
	152	US-20170314073	11-02-2017	GRÖMMINGER; Sebastian et al.	
	153	US-20170362636	12-21-2017	RAJAGOPAL; Aditya et al.	
	154	US-20180030551	02-01-2018	RAJAGOPAL; Aditya et al.	
	155	US-20180052110	02-22-2018	MALIK; Imran R. et al.	
	156	US-20180057864	03-01-2018	JACKY; Lucien A. E. et al.	
	157	US-20190002963	01-03-2019	RAJAGOPAL; Aditya	
	158	US-20190032112-A1	01-31-2019	RAJAGOPAL; Aditya et al.	
	159	US-20190112636	04-18-2019	RAJAGOPAL; Aditya et al.	
	160	US-20190233882	08-01-2019	JACKY; Lucien et al.	
	161	US-20200010876-A1	01-09-2020	MACDONALD; Christopher	

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		Examiner Name	Not yet assigned	
		Attorney Docket Number	88DG-373535-US	

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		Country Code ² Number ⁴ Kind Code ⁵ (if known)				
	001	CN-101570782-A	11-04-2009	CHUNHUA YANG [CN]	Abstract:	<input checked="" type="checkbox"/>
	002	CN-1936019-A	03-28-2007	UNIV XIAMEN [CN]	Abstract:	<input checked="" type="checkbox"/>
	003	EP-0519338-A1	12-23-1992	HOFFMANN LA ROCHE [CH]		<input type="checkbox"/>
	004	EP-1448581-B1	11-12-2008	INST SYSTEMS BIOLOGY [US]		<input type="checkbox"/>
	005	EP-1629108-B1	12-31-2014	PHRI PROPERTIES INC [US]		<input type="checkbox"/>
	006	EP-1963531-B1	09-21-2011	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	007	EP-2224017-A1	09-01-2010	ARKRAY INC [JP]		<input type="checkbox"/>
	008	WO-0107640-A2	02-01-2001	SEC DEP HOME DEPT [GB], et al.		<input type="checkbox"/>
	009	WO-02056014-A2	07-18-2002	GLAXO GROUP LTD [GB], et al.		<input type="checkbox"/>
	010	WO-02056014-A3	10-09-2003	GLAXO GROUP LTD [GB], et al.		<input type="checkbox"/>

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			Application Number	
Sheet 10 of 27			Filing Date	2023-07-13
			First Named Inventor	KARTALOV EMIL; P.
			Art Unit	
			Examiner Name	Not yet assigned
			Attorney Docket Number	88DG-373535-US

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		Country Code ² Number ⁴ Kind Code ⁵ (if known)				
	011	WO-03002979-A2	01-09-2003	ILLUMINA INC [US], et al.		<input type="checkbox"/>
	012	WO-03020967-A1	03-13-2003	ROCHE DIAGNOSTICS GMBH [DE], et al.		<input type="checkbox"/>
	013	WO-2004087950-A2	10-14-2004	ROCHE DIAGNOSTICS GMBH [DE], et al.		<input type="checkbox"/>
	014	WO-2006079049-A2	07-27-2006	THIRD WAVE TECH INC [US], et al.		<input type="checkbox"/>
	015	WO-2007076128-A2	07-05-2007	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	016	WO-2007076128-A3	11-29-2007	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	017	WO-2007076129-A2	07-05-2007	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	018	WO-2007076129-A3	03-06-2008	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	019	WO-2007076132-A2	07-05-2007	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	020	WO-2007076132-A3	09-07-2007	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>

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		Country Code ² Number ⁴ Kind Code ⁵ (if known)				
	021	WO-2007139766-A2	12-06-2007	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	022	WO-2007139766-A3	12-11-2008	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	023	WO-2008118998-A2	10-02-2008	PRIMERA BIOSYSTEMS INC [US], et al.		<input type="checkbox"/>
	024	WO-2008124847-A2	10-16-2008	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	025	WO-2008124847-A3	02-19-2009	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	026	WO-2009036514-A2	03-26-2009	MOLECULAR PLANT BREEDING NOMINEES LTD [AU], et al.		<input type="checkbox"/>
	027	WO-2010007355-A1	01-21-2010	LUMORA LTD [GB], et al.		<input type="checkbox"/>
	028	WO-2010013017-A1	02-04-2010	OXITEC LTD [GB], et al.		<input type="checkbox"/>
	029	WO-2010017543-A1	02-11-2010	SMITHS DETECTION INC [US], et al.		<input type="checkbox"/>
	030	WO-2010019826-A1	02-18-2010	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>

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		Country Code ²	Number ³ Kind Code ⁵ (if known)				
	031	WO-2010128206-A1		11-11-2010	EXPRESSION ANALYTICS OY [FI], et al.		<input type="checkbox"/>
	032	WO-2011047087-A2		04-21-2011	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	033	WO-2011047087-A3		08-18-2011	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	034	WO-2011100541-A2		08-18-2011	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	035	WO-2011100541-A3		01-05-2012	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	036	WO-2011116088-A2		09-22-2011	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	037	WO-2011116088-A3		02-02-2012	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	038	WO-2012058638-A2		05-03-2012	HARVARD COLLEGE [US], et al.		<input type="checkbox"/>
	039	WO-2012058638-A3		12-20-2012	HARVARD COLLEGE [US], et al.		<input type="checkbox"/>
	040	WO-2012106428-A2		08-09-2012	UNIV FLORIDA [US], et al.		<input type="checkbox"/>

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	041	WO-2012135340-A2		10-04-2012	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	042	WO-2012135340-A3		12-20-2012	NANOSTRING TECHNOLOGIES INC [US], et al.		<input type="checkbox"/>
	043	WO-2013096851-A1		06-27-2013	HARVARD COLLEGE [US]		<input type="checkbox"/>
	044	WO-2013116780-A1		08-08-2013	CALIFORNIA INST OF TECHN [US], et al.		<input type="checkbox"/>
	045	WO-2014022827-A1		02-06-2014	CALIFORNIA INST OF TECHN [US]		<input type="checkbox"/>
	046	WO-2014116884-A1		07-31-2014	CALIFORNIA INST OF TECHN [US]		<input type="checkbox"/>
	047	WO-2015147370-A1		10-01-2015	SEEGENE INC [KR]		<input type="checkbox"/>
	048	WO-2016154600-A1		09-29-2016	MASSACHUSETT S GEN HOSPITAL [US]		<input type="checkbox"/>
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	050	WO-2017173035-A1		10-05-2017	CHROMACODE INC [US]		<input type="checkbox"/>

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			Application Number		
			Filing Date	2023-07-13	
			First Named Inventor	KARTALOV EMIL; P.	
			Art Unit		
			Examiner Name	Not yet assigned	
			Attorney Docket Number	88DG-373535-US	
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FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ²	Number ³ Kind Code ⁵ (if known)				
	051	WO	2017218777-A1	12-21-2017	CALIFORNIA INST OF TECHN [US]		<input type="checkbox"/>
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	053	WO	2019006023-A1	01-03-2019	CHROMACODE INC [US]		<input type="checkbox"/>
	054	WO	2019079204-A1	04-25-2019	CHROMACODE INC [US]		<input type="checkbox"/>
	055	WO	2019169043-A1	09-06-2019	CHROMACODE INC [US]		<input type="checkbox"/>
	056	WO	9746714-A1	12-11-1997	UNIV UTAH RES FOUND [US], et al.		<input type="checkbox"/>
	057	WO	99/52708	10-21-1999	LUMINEX CORP [US]		<input type="checkbox"/>
	058	WO	9919515-A1	04-22-1999	LUMINEX CORP [US]		<input type="checkbox"/>

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	001	ARYA, et al., Basic principles of real-time quantitative PCR, 2005, Expert Rev. Mol. Diagn., 5(2), pg. 209-219.	<input type="checkbox"/>
	002	BEIGE, et al. Clinical evaluation of a Mycobacterium tuberculosis PCR assay. J Clin Microbiol. 1995 Jan;33(1):90-5.	<input type="checkbox"/>
	003	BLACKET et al. Universal primers for fluorescent labeling of PCR fragments - an efficient and cost-effective approach to genotyping by fluorescence. Moleular Ecology Resources 12(3):456-463 (2012) Epub 2012 Jan 24.	<input type="checkbox"/>
	004	CHAMBERLAIN, et al. Deletion screening of the Duchenne muscular dystrophy locus via multiplex DNA amplification. Nucleic Acids Res. 1988 Dec 9;16(23):11141-56.	<input type="checkbox"/>
	005	CHAPIN et al., Rapid microRNA profiling on encoded gel microparticles. Angewandte Chemie International Edition, 50(10):2289-2293, 2011.	<input type="checkbox"/>
	006	CHEN, et al. A Homogeneous, ligase-mediated DNA diagnostic test. Genome Research, 1998, volume 8, pages 549-556.	<input type="checkbox"/>
	007	CHONG, et al. Single-tube multiplex-PCR screen for common deletional determinants of alpha-thalassemia. Blood. 2000 Jan 1;95(1):360-2.	<input type="checkbox"/>
	008	Chromatogram, 2011, 2 pages. Dorland's illustrated medical dictionary. Retrieved online on 22 January 2014 from «http://www.credoreference.com».	<input type="checkbox"/>
	009	CHUN et al. Dual priming oligonucleotide system for the multiplex detection of respiratory viruses and SNP genotyping of CYP2C19 gene. Nucleic Acids Res. 35(6):e40 (2007).	<input type="checkbox"/>

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	010	CRAIG, et al. Ordering of cosmid clones covering Herpes simplex virus type I (HSV-I) genome: a test case for fingerprinting by hybridisation. Nucleic Acids Research, 1990, volume 18, pages 2653-2660.	<input type="checkbox"/>
	011	DOS SANTOS, et al. A simple one-step real-time RT-PCR for diagnosis of dengue virus infection. J Med Virol. 2008 Aug;80(8):1426-33. .	<input type="checkbox"/>
	012	EL-HAJJ, et al. Detection of rifampin resistance in Mycobacterium tuberculosis in a single tube with molecular beacons. J Clin Microbiol. 2001 Nov;39(11):4131-7.	<input type="checkbox"/>
	013	EMBL-Bank: AJ303204. http://www.ebi.ac.uk/Tools/dbfetch/embifetch?db=embl&id=AJ303204&format=default&style=default&Retrieve=Retrieve . Accessed February 2012.	<input type="checkbox"/>
	014	EMBL-Bank: GQ395623. http://www.ebi.ac.uk/Tools/dbfetch/embifetch?db=embl&id=GQ395623&format=default&style=default&Retrieve=Retrieve . Accessed February 2012.	<input type="checkbox"/>
	015	EP17814096.8 Extended European Search Report dated December 2, 2019.	<input type="checkbox"/>
	016	European Office Action for Patent Application No. EP13824744.0 dated November 6, 2018.	<input type="checkbox"/>
	017	European Patent Application No. 17776626 Office Action dated October 18, 2019.	<input type="checkbox"/>
	018	EVANS et al. Digital PCR for Noninvasive Detection of Aneuploidy: Power Analysis Equations for Feasibility. Fetal Diagn. Ther. 31:244-247(2012).	<input type="checkbox"/>
	019	Extended European Search Report for Patent Application No. 13744261.2 dated May 3, 2016.	<input type="checkbox"/>

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	020	Extended European Search Report for Patent Application No. EP13824744.0 dated February 26, 2016.	<input type="checkbox"/>
	021	FODOR, et al. Multiplexed biochemical assays with biological chips. Nature. 1993 Aug 5;364(6437):555-6.	<input type="checkbox"/>
	022	FORTINA, et al. Digital mRNA profiling. Nat Biotechnol. 2008 Mar;26(3):293-4.	<input type="checkbox"/>
	023	FU et al. Multiplex detection and SNP genotyping in a single fluorescence channel. PLoS One 7(1):Article No. e30340 (January 2012).	<input type="checkbox"/>
	024	GANDELMAN, et al., Novel Bioluminescent Quantitative Detection of Nucleic Acid Amplification in Real-Time, PLoS One, 2010, 5(11):e14155, 14 pages.	<input type="checkbox"/>
	025	GenBank: M93130.1. Dengue type 3 virus complete genome RNA, complete cds. http://www.ncbi.nlm.nih.gov/nuccore/M93130 . Accessed February 2012.	<input type="checkbox"/>
	026	HAN, et al., Quantum-dot-tagged microbeads for multiplexed optical coding of biomolecules. Nature Biotechnology 19.99 (July 2001): 631-635.	<input type="checkbox"/>
	027	HARTMAN, et al. Development of a novel internal positive control for Taqman based assays. Mol Cell Probes. 2005 Feb;19(1):51-9. Epub 2004 Dec 10.	<input type="checkbox"/>
	028	HAUSTEIN et al. Fluorescence correlation spectroscopy: novel variations of an established technique. Ann Rev Biophys Biomol Struct 36:151-69 (2007).	<input type="checkbox"/>
	029	HEIDARI, et al. Detection of Plasmodium falciparum Directly from Blood Samples Using the Polymerase Chain Reaction. Journal of Sciences, Islamic Republic of Iran. 2005 16(1):21-24.	<input type="checkbox"/>

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	030	HENEGARIU, et al. Multiplex PCR: critical parameters and step-by-step protocol. Biotechniques. 1997 Sep;23(3):504-11.	<input type="checkbox"/>
	031	HIV databases. http://www.hiv.lanl.gov/content/index . Accessed February 2012.	<input type="checkbox"/>
	032	Holland, et al., Detection of specific polymerase chain reaction product by utilizing the 5' to 3' exonuclease activity of Thermus aquaticus DNA polymerase. PNAS (USA) 88:7276-7280, 1991.	<input type="checkbox"/>
	033	HOREJSH, et al. A molecular beacon, bead-based assay for the detection of nucleic acids by flow cytometry. Nucleic Acids Res. 2005 Jan 19;33(2):e13.	<input type="checkbox"/>
	034	HUANG, et al. Identification of 8 foodborne pathogens by multicolor combinational probe coding technology in a single real-time PCR. Clin Chem. 2007 Oct;53(10):1741-8. Epub 2007 Aug 10.	<input type="checkbox"/>
	035	HUANG, et al. Multicolor combinatorial probe coding for real-time PCR. PLoS One. 2011 Jan 14;6(1):e16033. .	<input type="checkbox"/>
	036	HUDECOVA, I. et al. Maternal Plasma Fetal DNA Fractions in Pregnancies with Low and High Risks for Fetal Chromosomal Aneuploidies. PLoS ONE 9(2):e88484 (2014). .	<input type="checkbox"/>
	037	International Search Report and Written Opinion dated 11/21/19 for PCT/US2019/050050.	<input type="checkbox"/>
	038	JOTHIKUMAR, et al. Design of FRET-TaqMan probes for multiplex real-time PCR using an internal positive control. Biotechniques. 2009 Jun;46(7):519-24. .	<input type="checkbox"/>
	039	KLOSTRANEC et al., Convergence of quantum dot barcodes with microfluidics and signal processing for multiplexed high-throughput infectious disease diagnostics. Nano Letters, 7(9):2812-2818, 2007.	<input type="checkbox"/>

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	040	KUHN et al. Hybridization of DNA and PNA molecular beacons to single-stranded and double-stranded DNA targets. J Am Chem Soc. 124(6):1097-103 (2002).	<input type="checkbox"/>
	041	LAO, et al. Multiplexing RT-PCR for the detection of multiple miRNA species in small samples. Biochem Biophys Res Commun. 2006 Apr 28;343(1):85-9. Epub 2006 Feb 28.	<input type="checkbox"/>
	042	LEE, et al. Novel multiplex PCR using dual-priming oligonucleotides for detection and discrimination of the Mycobacterium tuberculosis complex and M. bovis BCG. J Clin Microbiol. 2010 Dec;48(12):4612-4. Epub 2010 Oct 13.	<input type="checkbox"/>
	043	LEE, et al. Seven-color, homogeneous detection of six PCR products. Biotechniques. 1999 Aug;27(2):342-9.	<input type="checkbox"/>
	044	LI et al., Multiplexed detection of pathogen DNA with DNA-based fluorescence nanobarcodes. Nature Biotechnology, 23(7):885-889, 2005.	<input type="checkbox"/>
	045	LIEW, et al. Validating a custom multiplex ELISA against individual commercial immunoassays using clinical samples. Biotechniques. 2007 Mar;42(3):327-8, 330-3.	<input type="checkbox"/>
	046	LIN et al., Self-assembled combinatorial encoding nanoarrays for multiplexed biosensing. Nano Letters, 7(2):507-512, 2007.	<input type="checkbox"/>
	047	LIVAK, et al. Oligonucleotides with fluorescent dyes at opposite ends provide a quenched probe system useful for detecting PCR product and nucleic acid hybridization. PCR Methods Appl. 1995 Jun;4(6):357-62.	<input type="checkbox"/>
	048	LOFTIS et al., Principles of real-time PCR. Veterinary PCR Diagnostics pp.3-17 (2012).	<input type="checkbox"/>
	049	LOGAN,et al., An Overview of real-time PCR platforms. 2004, In Real-time PCR: An essential guide, pg. 13-30.	<input type="checkbox"/>

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	051	MORRISON, et al. Two-color ratio-coding of chromosome targets in fluorescence in situ hybridization: quantitative analysis and reproducibility. Cytometry. 1997 Apr 1;27(4):314-26.	<input type="checkbox"/>
	052	MYERS et al., A Handheld Point-of-Care Genomic Diagnostic System. PLoS One 8(8): e70266; pages 1-9 (2013).	<input type="checkbox"/>
	053	NAVARRO et al., Real-time PCR detection chemistry. Clin Chim Acta. 439:231-250 (2015).	<input type="checkbox"/>
	054	NOORDHOEK, et al. Sensitivity and specificity of PCR for detection of <i>Mycobacterium tuberculosis</i> : a blind comparison study among seven laboratories. J Clin Microbiol. 1994 Feb;32(2):277-84.	<input type="checkbox"/>
	055	OLIVEIRA, et al. Multiplex PCR strategy for rapid identification of structural types and variants of the mec element in methicillin-resistant <i>Staphylococcus aureus</i> . Antimicrob Agents Chemother. 2002 Jul;46(7):2155-61.	<input type="checkbox"/>
	056	OU, et al. DNA amplification for direct detection of HIV-1 in DNA of peripheral blood mononuclear cells. Science. 1988 Jan 15;239(4837):295-7.	<input type="checkbox"/>
	057	PATON, et al. Detection and characterization of Shiga toxigenic <i>Escherichia coli</i> by using multiplex PCR assays for <i>stx1</i> , <i>stx2</i> , <i>eaeA</i> , enterohemorrhagic <i>E. coli</i> <i>hlyA</i> , <i>rfbO111</i> , and <i>rfbO157</i> . J Clin Microbiol. 1998 Feb;36(2):598-602.	<input type="checkbox"/>
	058	PATTERSON, et al. Detection of HIV-1 DNA and messenger RNA in individual cells by PCR-driven in situ hybridization and flow cytometry. Science. 1993 May 14;260(5110):976-9.	<input type="checkbox"/>

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			First Named Inventor	KARTALOV EMIL; P.	
			Art Unit		
			Examiner Name	Not yet assigned	
			Attorney Docket Number	88DG-373535-US	
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	059	PCT/US19/40392 International Search Report and Written Opinion dated November 06, 2019.	<input type="checkbox"/>
	060	PCT/US2013/024509 International search report and written opinion dated April 12, 2013 .	<input type="checkbox"/>
	061	PCT/US2013/053512 International Search Report and Written Opinion dated October 16, 2013.	<input type="checkbox"/>
	062	PCT/US2017/24933 International search report and written report dated June 22, 2017.	<input type="checkbox"/>
	063	PCT/US2017/37682 International Search Report and Written Opinion dated November 16, 2017.	<input type="checkbox"/>
	064	PCT/US2018/039846 International Preliminary Report on Patentability dated December 31, 2019.	<input type="checkbox"/>
	065	PCT/US2018/055927 International Preliminary Report on Patentability dated April 21, 2020.	<input type="checkbox"/>
	066	PCT/US2018/39846 International Search Report and Written Opinion Mailed September 14, 2018.	<input type="checkbox"/>
	067	PCT/US2019/019906 International Preliminary Report on Patentability September 01, 2020.	<input type="checkbox"/>
	068	PCT/US2019/019906 International Search Report and Written Opinion dated May 06, 2019.	<input type="checkbox"/>
	069	PCT/US2019/027751 International Preliminary Report on Patentability dated October 20, 2020.	<input type="checkbox"/>
	070	PCT/US2019/027751 International Search Report and Written Opinion dated June 26, 2019.	<input type="checkbox"/>
	071	PCT/US2019/035129 International Search Report and Written Opinion dated November 01, 2019.	<input type="checkbox"/>

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	073	PCT/US2019/040392 International Preliminary Report on Patentability dated January 05, 2021.	<input type="checkbox"/>
	074	PCT/US2019/041239 International Preliminary Report on Patentability dated January 21, 2021.	<input type="checkbox"/>
	075	PCT/US2019/041239 International Search Report and Written Opinion dated September 30, 2019.	<input type="checkbox"/>
	076	PETERSEN, et al. Short PNA molecular beacons for real-time PCR allelic discrimination of single nucleotide polymorphisms. Mol Cell Probes. 2004 Apr;18(2):117-22.	<input type="checkbox"/>
	077	PIERCE, et al. Linear-After-The-Exponential (LATE)-PCR: primer design criteria for high yields of specific single-stranded DNA and improved real-time detection. Proc Natl Acad Sci U S A. 2005 Jun 14;102(24):8609-14. Epub 2005 Jun 3.	<input type="checkbox"/>
	078	Plasmodium falciparum (Plasmodium falciparum) Genome Browser Gateway. http://microbes.ucsc.edu/cgi-bin/hgGateway?hgsid=612764&clade=eukaryota-protista&org=0&db=0 . Accessed February 2012.	<input type="checkbox"/>
	079	PTAK, et al. Inhibition of human immunodeficiency virus type 1 replication in human cells by Debio-025, a novel cyclophilin binding agent. Antimicrob Agents Chemother. 2008 Apr;52(4):1302-17. Epub 2008 Jan 22.	<input type="checkbox"/>
	080	RAJAGOPAL et al. Supercolor Coding Methods for Large-Scale Multiplexing of Biochemical Assays. Analytical Chemistry 85:7629-7636 (2013).	<input type="checkbox"/>
	081	RAJAGOPAL et al., Significant Expansion of Real-Time PCR Multiplexing with Traditional Chemistries using Amplitude Modulation. Scientific Reports. 9(1): 1053 (2019).	<input type="checkbox"/>

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	082	Rickert et al., "Multiplexed Real-Time PCR Using Universal Reporters," Clin. Chem., 50(9):1680- 1683, 2004.	<input type="checkbox"/>
	083	ROSENSTRAUS, et al. An internal control for routine diagnostic PCR: design, properties, and effect on clinical performance. J Clin Microbiol. 1998 Jan;36(1):191-7.	<input type="checkbox"/>
	084	ROTH, et al. Feasibility and efficacy of routine PCR screening of blood donations for hepatitis C virus, hepatitis B virus, and HIV-1 in a blood-bank setting. Lancet. 1999 Jan 30;353(9150):359-63.	<input type="checkbox"/>
	085	SAIKI, et al. Primer-directed enzymatic amplification of DNA with a thermostable DNA polymerase. Science, 239(4839):487-491 (January 29, 1988).	<input type="checkbox"/>
	086	SAMBROOK, et al. Molecular Cloning: A Laboratory Manual. 2nd Edition, 1989.	<input type="checkbox"/>
	087	SANGER et al. DNA sequencing with chain-terminating inhibitors. PNAS USA 1977 Dec;74(12):5463-7 (1977).	<input type="checkbox"/>
	088	Second Office Action for Chinese Patent Application No. 201380049844.9 dated September 19, 2016 (w/translation).	<input checked="" type="checkbox"/>
	089	SPEICHER, et al. Karyotyping human chromosomes by combinatorial multi-fluor FISH. Nat Genet. 1996 Apr;12(4):368-75.	<input type="checkbox"/>
	090	ThermoFisher Scientific Fluorescence SpectraViewer. Retrieved from http://www.thermofisher.com/us/en/home/life-science/cell-analysis/labeling-chemistry/fluorescence-spectraviewer.html on September 25, 2015.	<input type="checkbox"/>
	091	TIRASOPHON, et al. A novel detection of a single Plasmodium falciparum in infected blood. Biochem Biophys Res Commun. 1991 Feb 28;175(1):179-84.	<input type="checkbox"/>

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	092	TYAGI, et al. Multicolor molecular beacons for allele discrimination. Nat Biotechnol. 1998 Jan;16(1):49-53.	<input type="checkbox"/>
	093	TYAGI, et al. Wavelength-shifting molecular beacons. Nat Biotechnol. 2000 Nov;18(11):1191-6.	<input type="checkbox"/>
	094	United States Application No. 16/128,343 Final Office Action dated March 16, 2021.	<input type="checkbox"/>
	095	URDEA, et al. Requirements for high impact diagnostics in the developing world. Nature. 2006 Nov 23;444 Suppl 1:73-9.	<input type="checkbox"/>
	096	U.S. Application No. 13/756,760 Notice of allowance dated June 2, 2014.	<input type="checkbox"/>
	097	U.S. Application No. 13/756,760 Office action dated January 24, 2014 .	<input type="checkbox"/>
	098	U.S. Application No. 13/958,479 Office Action dated March 1, 2016.	<input type="checkbox"/>
	099	U.S. Application No. 14/451,876 Office action dated June 6, 2017.	<input type="checkbox"/>
	100	U.S. Application No. 14/451,876 Office action dated November 23, 2016.	<input type="checkbox"/>
	101	U.S. Application No. 15/623,974 Notice of Allowance dated July 3, 2018.	<input type="checkbox"/>
	102	U.S. Application No. 15/623,974 Office Action dated February 22, 2018.	<input type="checkbox"/>
	103	U.S. Application No. 15/677,772 Final Office Action Mailed June 7, 2018.	<input type="checkbox"/>
	104	U.S. Application No. 15/677,772 Non-Final Office Action Mailed February 8, 2018.	<input type="checkbox"/>
	105	U.S. Application No. 15/892,245 First Action Interview - Office Action mailed July 19, 2018.	<input type="checkbox"/>

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	107	U.S. Application No. 15/892,245 Preinterview First Interview Office Action Mailed May 11, 2018.	<input type="checkbox"/>
	108	U.S. Application No. 16/020,673 Non-Final Office Action dated November 27, 2020.	<input type="checkbox"/>
	109	U.S. Application No. 14/451,876 Notice of Allowance dated July 11, 2018.	<input type="checkbox"/>
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	116	U.S. Serial No. 15/914,356 Office Action dated July 22, 2019.	<input type="checkbox"/>
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	121	VOGELSTEIN, et al., Digital PCR, PNAS August 3, 1999 96 (16) 9236-9241; https://doi.org/10.1073/pnas.96.16.9236 .	<input type="checkbox"/>
	122	WANG, et al. Locked nucleic acid molecular beacons. J Am Chem Soc. 2005 Nov 16;127(45):15664-5.	<input type="checkbox"/>
	123	WATERS, et al. Microchip device for cell lysis, multiplex PCR amplification, and electrophoretic sizing. Anal Chem. 1998 Jan 1;70(1):158-62.	<input type="checkbox"/>
	124	WEIDMANN, et al. Rapid detection of herpes simplex virus and varicella-zoster virus infections by real-time PCR. J Clin Microbiol. 2003 Apr;41(4):1565-8.	<input type="checkbox"/>
	125	WIESE, et al. Simultaneous multianalyte ELISA performed on a microarray platform. Clin Chem. 2001 Aug;47(8):1451-7.	<input type="checkbox"/>
	126	XU et al., Multiplexed SNP genotyping using the Qbead system: a quantum dot-encoded microsphere-based assay. Nucleic Acids Research, 31(8):e43, 2003.	<input type="checkbox"/>
	127	YANG, L. et al. A novel universal real-time PCR system using the attached universal duplex probes for quantitative analysis of nucleic acids. BMC Molecular Biology, 9:54 (1-13) June 4, 2008.	<input type="checkbox"/>
	128	ZHANG, et al. A novel real-time quantitative PCR method using attached universal template probe. Nucleic Acids Res. 2003 Oct 15;31(20):e123(pp. 1-8).	<input type="checkbox"/>

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	129	ZHANG, et al. Novel Multiplex PCR Assay for Characterization and Concomitant Subtyping of Staphylococcal Cassette Chromosome mec Types I to V in Methicillin-Resistant Staphylococcus aureus. J Clin Microbiol. 2005 Oct;43(10):5026-33.	<input type="checkbox"/>
	130	ZHAO et al. Comprehensive Algorithm for Quantitative Real-Time Polymerase Chain Reaction. Journal of Computational Biology 12(8):1047-1064 (2005).	<input type="checkbox"/>

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /RSN/

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