

## Molecular Beacons Patents and Patent Applications

### DETECTABLY LABELED DUAL CONFORMATION OLIGONUCLEOTIDE PROBES, ASSAYS AND KITS

Tyagi S, Kramer FR, and Lizardi PM

Jurisdiction	Filing Date	Application	Issue Date	Patent Number	Termination Date
United States	05/12/1995	08/439,819	07/20/1999	5,925,517	07/20/2016
Australia	05/13/1996	52324/96	02/25/1999	702598	05/13/2016
Belgium	05/10/1996	96303544.9	10/22/2008	0745690	05/10/2016
Canada	05/10/1996	2,176,266	10/18/2011	2,176,266	05/10/2016
Denmark	05/10/1996	96303544.9	10/22/2008	0745690	05/10/2016
France	05/10/1996	96303544.9	10/22/2008	0745690	05/10/2016
France	10/21/2008	08018375.9	11/05/2014	2053134	05/10/2016
Germany	05/10/1996	96303544.9	10/22/2008	0745690	05/10/2016
Germany	10/21/2008	08018375.9	11/05/2014	2053134	05/10/2016
Great Britain	05/10/1996	96303544.9	10/22/2008	0745690	05/10/2016
Great Britain	10/21/2008	08018375.9	11/05/2014	2053134	05/10/2016
Italy	05/10/1996	96303544.9	10/22/2008	0745690	05/10/2016
Japan	05/13/1996	8-118110	09/08/2006	3850914	05/13/2016
Portugal	05/10/1996	96303544.9	10/22/2008	0745690	05/10/2016
Sweden	05/10/1996	96303544.9	10/22/2008	0745690	05/10/2016
Sweden	10/21/2008	08018375.9	11/05/2014	2053134	05/10/2016
The Netherlands	05/10/1996	96303544.9	10/22/2008	0745690	05/10/2016

### NUCLEIC ACID DETECTION PROBES HAVING NON-FRET FLUORESCENCE QUENCHING AND KITS AND ASSAYS INCLUDING SUCH PROBES

Tyagi S and Kramer FR

Jurisdiction	Filing Date	Application	Issue Date	Patent Number	Termination Date
United States	12/12/1997	08/990,176	11/21/2000	6,150,097	04/12/2017
Australia	04/14/1997	29224/97	10/21/1999	713667	04/14/2017
Canada	04/14/1997	2,252,048	03/11/2008	2,252,048	04/14/2017
Japan	04/14/1997	9-537293	01/05/2007	3898228	04/14/2017

### NON-COMPETITIVE CO-AMPLIFICATION METHODS

Kramer FR, Tyagi S, Alland D, Vet J, and Piatek A

Jurisdiction	Filing Date	Application	Issue Date	Patent Number	Termination Date
United States	10/20/2000	09/508,343	10/08/2002	6,461,817	09/12/2018
Australia	09/11/1998	94846/98	05/02/2002	743011	09/11/2018
Canada	09/11/1998	2,303,414	05/20/2008	2,303,414	09/11/2018
Japan	09/11/1998	2000-510898	05/15/2009	4306957	09/11/2018

### WAVELENGTH-SHIFTING PROBES AND PRIMERS

Tyagi S, Kramer FR, and Marras SAE

Jurisdiction	Filing Date	Application	Issue Date	Patent Number	Termination Date
United States	07/28/1998	09/123,764	03/14/2000	6,037,130	07/28/2018
Australia	07/28/1999	52402/99	10/23/2003	763106	07/28/2019
Canada	07/28/1999	2,336,489	05/03/2011	2,336,489	07/28/2019
France	07/28/1999	99937602.3	11/12/2008	1100971	07/28/2019
Germany	07/28/1999	99937602.3	11/12/2008	1100971	07/28/2019
Great Britain	07/28/1999	99937602.3	11/12/2008	1100971	07/28/2019
Italy	07/28/1999	99937602.3	11/12/2008	1100971	07/28/2019
Japan	07/28/1999	2000-562560	09/08/2006	3851088	07/28/2019

**ASSAYS FOR SHORT SEQUENCE VARIANTS****Tyagi A, Kramer FR, and Alland D**

<b>Jurisdiction</b>	<b>Filing Date</b>	<b>Application</b>	<b>Issue Date</b>	<b>Patent Number</b>	<b>Termination Date</b>
United States	07/24/2002	10/110,907	02/16/2010	7,662,550	12/03/2021
United States	11/09/2009	12/614,917	02/16/2016	9,260,761	05/05/2021
Australia	10/13/2000	80240/00	06/23/2005	781945	10/13/2020
Canada	10/13/2000	2,387,306	08/04/2009	2,387,306	10/13/2020
France	10/13/2000	00970925.4	08/16/2006	1230387	10/13/2020
Germany	10/13/2000	00970925.4	08/16/2006	60030145.1	10/13/2020
Great Britain	10/13/2000	00970925.4	08/16/2006	1230387	10/13/2020
Italy	10/13/2000	00970925.4	08/16/2006	1230387	10/13/2020
Japan	10/13/2000	2001-533197	02/10/2012	4919568	10/13/2020

**HOMOGENEOUS MULTIPLEX SCREENING ASSAYS AND KITS****Kramer FR**

<b>Jurisdiction</b>	<b>Filing Date</b>	<b>Application</b>	<b>Issue Date</b>	<b>Patent Number</b>	<b>Termination Date</b>
United States	04/30/2003	10/426,556	06/10/2008	7,385,043	11/26/2024
United States	05/07/2008	12/116,642	08/10/2010	7,771,949	11/26/2024
Australia	04/29/2004	2004236725	11/21/2008	236725	04/29/2024
China	04/29/2004	200480018729.6	12/25/2009	200480018729.6	04/29/2024
Japan	04/29/2004	2006-514227	01/07/2011	4658928	04/29/2024
Canada	04/29/2004	2,524,080	10/22/2013	2,524,080	04/29/2024
France	04/29/2004	04751175.3	12/31/2014	1629108	04/29/2024
Germany	04/29/2004	04751175.3	12/31/2014	1629108	04/29/2024
Great Britain	04/29/2004	04751175.3	12/31/2014	1629108	04/29/2024
Italy	04/29/2004	04751175.3	12/31/2014	1629108	04/29/2024
Switzerland	04/29/2004	04751175.3	12/31/2014	1629108	04/29/2024