FORM PTO-1595 U.S. DEPARTMENT OF COMMERCE (Revised 3-01) Patent and Trademark Office		
RECORDATION F	FORM COVER	SHEET
TO THE HONORABLE DIRECTOR OF U.S. PATENTS AND TRADE		
Please record the attached original documents or copy thereof.		
1. Name of conveying party(ies): [Use numbers if there are multiple inventors and multiple dates of execution.]  (1)Molecular Staging Inc. (2)  Additional names of conveying party(ies) attached?  □ YES □ NO	Na Inte Stn City Sta Zip	me and address of receiving party(ies):  me: QIAGEN GmbH  emal Address: QIAGEN ST 1  pet Address:  /: Hilden  te: GERMANY  : 40724  ditlonal name(s) and address(es) attached?  YES ☑ NO
Nature of conveyance:		
X Assignment Merger		Other
Security Agreement Change of Nam	h <del>á</del>	
Execution Date: (1) September 24, 2004		
Application number(s) or patent number(s):  If this document is being filed together with a new application.	n, the execution	date of the application is:
A. Patent Application No.(s):	B. Pat	ent No.(s): 6,323,009
5. Name and address of party to whom correspondence concerning document should be mailed:  NEEDLE & ROSENBERG, P.C. Suite 1000 999 Peachtree Street Atlanta, Georgia 30309	6.	Total number of applications and patents involved: 1
7. Total fee (37 CFR § 3.41): \$40.00 ☐ Check enclosed		
□ The Commissioner is hereby authorized to charge the tot		t Account No. 14-0629 (Attach dublicate conv of this
form if paying by deposit account)  The Commissioner is hereby authorized to charge any un	******	*****************************

MAR. 27. 2006 3:18PM NEEDLE & ROSENBERG

NO. 2623 P. 4

ATTORNEY DOCKET NO. 17104.0001U1 Patent No. 6,323,009 Page 2 of 2

To the best of my knowledge and belief, original document	the foregoing information is true and correct and any attached copy is a true copy of the
Scott D. Marty Reg. No. 53,277	3. 27.06 Date
Total Number of Pages Including Cover Sheet, At	tachments, and Document: 16
GERTIFIC	ATE OF FACSIMILE TRANSMISSION UNDER 37 C.F.R. § 1.8
I hereby certify that this correspondence and any iten Assignment Division at (571) 273-0140 on the date in	ns indicated as attached or included are being transmitted via facsimile transmission to: the indicated below.
	3-27-06
Scott D. Marty	Data

ASSIGNMENT OF PATENTS

WHEREAS, Molecular Staging Inc. (hereafter "Assignor"), a Delaware corporation

having a principal place of business at 300 George Street, New Haven, Connecticut 06511, is

the owner of the patents (the "Patents") and the patent applications (the "Patent

Applications") set forth on Schedule A attached hereto (collectively the "Patents and Patent

Applications"), and the inventions described in and claimed therein (the "Inventions"); and,

WHEREAS, QIAGEN GmbH (hereafter "Assignee"), a German Gesellschaft mit

beschraenkter Haftung having a place of business at Qiagen Str. 1, Hilden, 40724 Germany,

is desirous of acquiring the entire right, title and interest of Assignor in and to said Patents,

Patent Applications and Inventions.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN,

that for good and valuable consideration in the amount of ten dollars, the receipt of which is

hereby acknowledged, Assignor has sold, assigned, transferred and conveyed and by these

presents does hereby sell, assign, transfer and convey, unto said Assignee, its successors and

assigns, its entire right, title and interest in and to

(1) the Patents and Patent Applications throughout the world, the Inventions, all

divisions, continuations, continuations-in-part and renewals of such Patents and Patent

Applications, all patents which may be granted on such Patent Applications and Inventions,

and all reissues, re-examinations and extensions thereof; and all reissues, re-examinations and

extensions of such Patents;

(2) all applications for industrial property protection, including, without limitation, all

- (3) all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for the Inventions in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and
- (4) all claims for damages by reason of past infringement, with the right to sue for, and collect the same for the use of Assignee, its successors and assigns, as well as all of the rights incident to such ownership, including but not limited to manufacturing, use, sale and importation of the products and/or methods evidenced by the Patents and Patent Applications.

Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the Assignce, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

Assignor hereby covenants and agrees that it has full right to convey the entire interest herein assigned, and that it has not executed, and will not execute, any agreement in conflict herewith.

This Assignment is effective as of the 24th day of September, 2004.

IN WITNESS WHEREOF, Assignor has caused these presents to be signed by a duly authorized officer.

MOLECULAR STAGING INC., Assignor

Jame: Grancoon

Title:

On this 13th day of , 2005, before me, a Notary Public,

came Live The Surface, to me known and known to be the individual described in and who executed the foregoing assignment, and he duly acknowledged the same to be his free act and deed.

Notary Public TINDAY F FORY Je

My Commission Expires: 1-31-09

This Assignment is effective as of the 24th day of September, 2004.

IN WITNESS WHEREOF, Assignee has caused these presents to be signed by a duly authorized officer.

CEO

Title:

Witness:

Brigitte Lange-Rogi

Signature: Enjo He Lange-Rogi

Witness:

Heidi Boulton

Signature:

 $\frac{Schedule\ A}{Patents\ and\ Patent\ Applications}$ 

Title	Country	Serial Number	Patent Number
Signal amplification with Lollipop probes	US	09/897,259	6,686,157
Destriction		<u> </u>	L
Protein expression profiling	US	09/597,836	6,531,283
Process for allele	·	<u> </u>	- <del></del> -
discrimination using	US	09/827,289	/ ggg 100
primer extension	V-0	09/827,269	6,777,183
Polyprimed	<u> </u>	<del></del>	<del></del> -
emplification of nucleic	US	09/577,444	6,291,187
acid sequences		1	7 11 (1 4 4 6
Polyprimed	'		
amplification of nucleic	US	09/897,665	6,670,126
acid sequences			, ,
Open circle probes with			
intramolecular stem	US	09/803,713	6,573,051
structures Nucleic acid	·		
amplification	Yte	00/00	
muhumonon j	US	09/982,212	6,617,137
Multiply primed		· · · · · · · · · · · · · · · · · · ·	
ampiification of nucleic	US	DD/605 103	5 707 744
acid sequences	UB	09/605,192	6,323,009
Generation of single		·	
tranded circular DNA	US	09/723,685	£ 408 000
rom linear self	OB	07/23,063	6,498,023
Detection and		<del> </del>	
emplification of RNA		] }	
ising target-mediated	US	09/547,757	6,368,801
igation of DNA by			ο'200'ου ϊ
NA ligase			
Thiophosphate-	·	<del></del>	<del></del>
irected ligation of	•		
ligonucleotides and	US	09/910,372	6,635,425
se in detection of		· 1	-, <del>-,</del>
ingle nucleotide	}	<b>)</b>	
olymorphisms		<u> </u>	
Thiophosphare-			
irected ligation of ligonucleotides and			
se in detection of	US	10/465,759	6,811,986
ngle nucleotide	•		
olymorphisms			
ethods for selectively		<u></u>	· · · <u></u>
olating DNA using	us I	22 man c : -	
lling circle	US	09/398,216	<b>6,235,5</b> 02
nplification		Ì	
ethods for selectively			
plating DNA using	us		
lling circle	U.S	00/810 005	
plification		09/818,927	6,576, <del>44</del> 8
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Methods for selectively			
isolating DNA using	US	09/398,217	6,287,825
rolling circle		ļ	
amplification	ļ		
Methods for selectively		, v <del>.</del>	PARILED
isolating DNA using	US	09/562,331	6,346,399
rolling circle			-,,
amplification			
Methods for selectively		7	Nh.
isolating DNA using	l es	09/562,332	6,372,434
rolling circle		05/304,552	0,572,454
amplification		j	
Methods for identifying			
DNA sequences for use	US		
in comparison of DNA	08	0.0.00.00.00	
		09/398,215	6,150,112
samples by their lack of	<b>!</b>	i i	
polymorphism			
METHOD OF			~
AMPLIFICATION	US	09/460,078	6,830,884
			-,,
	TTML	-	
Universal RCA	US	10/405,822	
· l		100,100,000	
Suppression of cross-			
reactivity and non-	us	09/931,736	
specific binding of	00	03/331,/30	
antibodies by Protein A			
Suppression of cross-	<del></del>	<del>-</del>	
reactivity and non-	HC/CON	10/021 015	
specific binding of	US/CON	10/931,015	ļ
antibodies by Protein A			
			<u></u> .,
Suppression of cross-		PCT/US02/27097	}
reactivity and non-	wo	1	
specific binding of		}	ļ
antibodies by Protein A		<u> </u>	
Signal Amplification		·-	
with Lollipop Probes	JP	2002-508032	j
!			1
Signal Amplification	EP	1950759.9	
with Lollipop Probes			į
Signal Amplification	CA	2411794	
with Lollipop Probes		2,	
Signal Amplification	AU	2001-271722	
with Lollipop Probes		2001-2/1/22	
Rolling Circle	ÜS	10/335,573	
amplification of RNA	US	10/335,5/3	}
Rolling Circle	PCT	DOTA 1000 Inc. too	
amplification of RNA	rci	PCT/US03/39430	
Real time detection of			
rolling circle	***		
	US	10/325,665	
amplification products			
Protein Expression	US/CON	10/341,287	
Profiling	W. T.		
Protein Expression	AU	2001-269944	71.00 TO-
Profiling			
Protein Expression	ĈĀ	2,411,838	
Profiling		1	1
Protein Expression	EP.	1948505.1	``.r
Profiling	_		
		<u> </u>	

Protein Expression	JP	2002-503102	
Profiling		<u> </u>	ļ
Protein Expression Profiling	CN	J811542	
Protein Expression Profiling	TW	90114960	!
Protein Expression Profiling	SG	200207285-8	
Protein Expression	·wo	PCT/US01/19657	
Profiling Process for enhanced molecular target detection using layered rolling circle amplification	us	10/177,629	
Open circle probes with intramolecular stem structures	US/DIV	10,404,944	
Nucleic Acid Amplification	US	09/977,868	·
Nucleic Acid	3316		WALK.
Amplification	Wo	WO03033724A	
Nucleic Acid Amplification	CA	2463933	
Nucleic Acid Amplification	ΑÙ	2002362874	·
Nucleic Acid Amplification	EP	2801776.2	
Nucleic Acid Amplification	US/CIP	10/272,465	
Nucleic Acid Amplification	US/CIP	10/327,602	
Nucleic Acid Amplification	US/CIP	10/429,229	
Nucleic acid amplification – PCT of 10/327,602; 10/429,229; 10/456,056	PCT	PCT/US03/40364	
Quality assessment of amplified genomic nucleic acids	US	10/854,021	
Multiply primed amplification of nucleic acid sequences Multiply primed	DIV	09/920,571	7
amplification of nucleic acid sequences Multiply primed	<b>ЛР</b>	2002/506247	
amplification of nucleic acid sequences	EP	1946712.5	
Multiply primed amplification of nucleic acid sequences	AU	200168725	
Multiply primed amplification of nucleic acid sequences	CA.	2410951	
Multiply primed amplification of nucleic acid sequences	IL	153,097	,

Methods for reducing			
the complexity of DNA	US/DIV		
Sequences			
Methods for identifying genes associated with			
diseases of specific	wo	PCT/US01/42827	İ
phenotypes	<u> </u>		) 
Methods for identifying		1	
genes associated with	us	09/984,346	i
diseases of specific			
phenolypes Method of WGA with	,r <u>-</u>		<u> </u>
reduced artifact	į US	10/456,056	Ì
production	<u> </u>		<u> </u>
Method for reducing			
artifacts in nucleic acid	US	09/514,113	
amplification			
Method for reducing			
artifacts in nucleic acid	ΑŬ	41864/01	
amplification	<b>\</b>	1	
Method for reducing	17823		
artifacts in nucleic acid	wo	PCT/U\$01/06491	
amplification			
Method for reducing	· •		
artifacts in nucleic acid	EP	1913174.7	į
amplification	İ	,,	
Method for reducing	<del>-}</del>		
ertifacts in nucleic acid	CA	2,401,650	i
amplification		2,101,000	
Method for reducing			·
artifacts in nucleic acid	JP	2001-563639	
amplification	•	2001-303039	
Method for reducing		<del>-</del>	<del></del>
artifacts in nucleic acid	JP	2001-563639	
amplification	J.	2001-303039	ì
Method and	· ,	18.	
compositions for	Us		}
efficient and specific	03	10/225 400	
rolling circle		10/325,490	<b>!</b>
amplification			İ
Detection method using		<del>-</del>	
dissociated rolling circle	110	10/050 444	
amplification	US	10/072,666	
Generation of single		<u>-</u>	
stranded circular DNA	t io	45,156,555	
from linear self	US	10/196,539	
Generation of single stranded circular DNA	*****		
	₩O	PCT/US00/32370	1
from linear self			
Gene Expression	US	09/910,383	
Profiling			i
Gene Expression	Wo	PCT/US02/15045	
Profiling			
Double ligation			,
Proximity mediated	US	10/454,946	
RCA			
Detection method using			
dissociated rolling circle	PCT	PCT/US08/00678	
amplification		<u>i</u> <u>.</u>	1

Conjugates of reduced			
untibodies and	US	10/143,517	
biomoleculaes		:	
Signal Amplification	WO	PCT/US01/20933	
with Lollipop Probes			
Signal Amplification	US	60/215,639	
with Lollipop Probes			
Repetitive enzymatic		60/151,164;	
generation of single-	US	60/222,799;	
stranded circular DNA		60/309,331	
Process for enhanced			
molecular target	us	60/299,345	
detection using layered			
rolling circle			
amplification			
Process for enhanced		i	
molecular target	wo	1	
detection using layered			
rolling circle			
amplification			
Process for allele	TIC.	60/194,843	
discrimination using primer extension	US	60/194,843	
Process for allele		-	· ·
discrimination using	wo	PCT/US01/11151	
primer extension	WO	101/0301/11131	
Process for allele		1	
discrimination using	JP	2001-575244	
primer extension	46	2001-373244	
Process for allele			
discrimination using	EP	469920-105	
primer extension	4 به	405520-105	
Process for allele		<del>-   · · · - · -    </del>	• •
discrimination using	CA	2,405,687	
primer extension	3.1		
Process for allele	= - <del></del>	i	
discrimination using	AU	2001/251359	
primer extension			
Polyprimed	<u> </u>		
amplification of nucleic	US	60/204,057	
acid sequences			!
Polyprimed			
amplification of nucleic	wo	PCT/US00/16130	
acid sequences			<u>.                                      </u>
Polyprimed			
amplification of nucleic	JP	469290-18	
acid sequences			
Polyprimed			
amplification of nucleic	EP	938263.1	
acid sequences			
Polyprimed	٥.	1	
amplification of nucleic	CA		
acid sequences		<del> </del>	
Polyprimed	4 7 7		
amplification of nucleic	AU	1	
acid sequences	·		
Phosphorothiolate- directed ligation of	us	60/250 010	ļ
district ukanon or	UB	60/259,918	,,

oligonucleotides			
Open circle probes with		ı	
intramolecular stem	wo	PCT/US02/02601	)
structures			
Open circle probes with		:	
intramolecular stem	TW	91102150	ļ
structures		71.02.30	
Generation of single		· · · · ·	
	V		
stranded circular DNA	US	60/168.511	
from linear self			
Generation of single			
stranded circular DNA	JP	20011542579	
from linear self			
Generation of single			
stranded circular DNA	EP	980827	
from linear self		1 30002,	ļ
Generation of single			
stranded circular DNA	CA	2.760.742	
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from linear self			
Generation of single			
stranded circular DNA	$\mathbf{A}\mathbf{U}$	18040/01	
from linear self		Į.	
Detection and		1	
amplification of RNA	Л°		
using target-mediated	Ψ-	2001-577404	
ligation of DNA by		2001-377404	
RNA ligase			
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Detection and	****		
amplification of RNA	EU	ļ	
using target-mediated		1928481.9	
ligation of DNA by			
RNA ligase		ł	}
Detection and			_
amplification of RNA	CA		
using target-mediated		2405456	!
ligation of DNA by		2405450	
RNA ligase			}
Detection and		<u> </u>	
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amplification of RNA	$\mathbf{A}\mathbf{U}$		
using target-mediated		US55331/01	l
ligation of DNA by			1
RNA ligase		1	<u> </u>
Detection and		j	<del></del>
amplification of RNA	wo	i	
using target-mediated		PCT/01/11947	
ligation of DNA by			
RNA ligase			
Conjugates of reduced			
antibodies and	บร	EN/200 221	1
biomolecules	UB	60/299,671	
			7.77
Conjugates of reduced		<u> </u>	
antibodies and	РСT	PCT/US02/14644	}
biomolecules		<u> </u>	
5' Thiophosphate-			
directed ligation of	EP	1	1
oligonucleotides and		ļ	
use in detection of		j	1
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single nucleotide		ļ	

5' Thiophosphate-			(
directed ligation of		}	
oligonucleotides and	CA	2,433,634	ĺ
use in detection of		2, 00,004	
single nucleotide		,	
polymorphisms			
5' Thiophosphate-	<del></del>		
directed ligation of		i	
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use in detection of	ΛŪ	2002/239809	1
single nucleotide	}	· ·	
polymorphisms	<u> </u>		
5° Thiophosphate-			
directed ligation of		1	1
oligonucleotides and	wo		
use in detection of	İ	PCT/US02/00005	
single nucleotide		101/0302/0003	
polymorphisms			İ
Methods for selectively		<del></del>	<del> </del>
isolating DNA using		60/100 004	
rolling circle	us	60/100,996	ļ
amplification	0.5		
	<u> </u>		<u></u>
Methods for selectively		1	
isolating DNA using	US	09/820,356	
rolling circle			}
amplification			1
Methods for reducing	US	<del>-</del>	
the complexity of DNA		60/100,999	
sequences			
Methods for identifying	· · · · · · · · · · · · · · · · · · ·		<del>-</del>
DNA sequences for us		60/100 025	
in comparison of DNA	US	60/100,935	
samples by their lack of	US		
polymorphism			1
		1/	
Methods for identifying			_
genes associated with		60/243,407	
disease of specific	US		
phenotypes			J
Multiply primed		) <u></u>	
amplification of nucleic	wo	PCT/US01/200217	
acid sequences			]
Method of			
Amplification of a	US	60/112,370	
circularized nucleic acid		35/1,2,5/0	
probe			
Method of	V= W   - B-	<del>-</del> -	· • • · · · · · · · · · · · · · · · · ·
Amplification of a	AU	37810/00	
circularized nucleic acid	AU	27819/00	
probe		1	
Method of	<u>,                                      </u>		
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Amplification of a	CA	2,394,800	
circularized nucleic acid		1	
probe			
Method of			· · · · · · · · · · · · · · · · · · ·
Amplification of a	ĖP	99969209.8	
circularized nucleic acid			
probe			
Method of	<u></u>	2000-588388	
Amplification of a	JР	2000-200300	
circularized nucleic acid			
		· -l	

probe	<u>-</u> .		
Method of Amplification of a circularized nucleic acid probe	wo	PCT/AU99/01110	<u> </u>
A cascade nucleic acid	US	<del></del>	
amplification reaction		09/091,146	
A cascade nucleic acid	US	03/03/23/40	
amplification reaction		09/465,590	
A cascade nucleic acid	wo	<u> </u>	·
amplification reaction		PCT/DK96/00513	
Cascade rolling circle	US	1	<del></del>
DNA amplification		09/356,843	
A cascade nucleic acid	EP		
amplification reaction		96939821.3	0 868 530
A cascade nucleic acid	US		0 000 230
amplification reaction		09/465,589	6,610,481
A cascade nucleic acid	AU	1	0,010,401
amplification reaction		76917/96	704 <b>7</b> 50
A cascade nucleic acid	DK	-	<u></u>
emplification reaction		868530	0 868 530
A cascade nucleic acid	DE		0 806 330
amplification reaction		696 27 698.4-08	0 868 530
A cascade nucleic acid	ÇH		0 808 330
amplification reaction		868530	0 868 530
A cascade nucleic acid	BE	<u> </u>	0.000 330
amplification reaction		868530	0 868 530
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emplification reaction		96939821.3	0 868 530
A cascade nucleic acid	NL		0.000.000
mplification reaction		868530	0 <b>86</b> 8 530
A cascade nucleic acid	ΙΤ		V VOI 230
mplification reaction		86853D	0 868 530
A cascade nucleic acid	GB		0 808 130
mplification reaction		868530	0 868 530
cascade nucleic acid	EP/DIV		2 000 220
mplification reaction		3000499.8	
cascade nucleic acid	CA		<u>-</u> -
mplification reaction		2239287	
cascade nucleic acid	FR		
mplification reaction		868530	0 868 530
fethod of amplification	US/CON		A 000 77Å
f a circularized nucleic		10/917,580	
id probe		70.40	

**RECORDED: 03/27/2006**