

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
SEQUENCE:	1	
CONVEYING PARTY DATA		
	Name	Execution Date
	ULF LANDEGREN	12/11/2006
RECEIVING PARTY DATA		
Name:	LANDEGREN GENE TECHNOLOGY AB	
Street Address:	RUDBECK LABORATORY	
City:	UPPSALA	
State/Country:	SWEDEN	
Postal Code:	751 85	
PROPERTY NUMBERS Total: 1		
	Property Type	Number
	Patent Number:	6878515
CORRESPONDENCE DATA		
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SIGNATURE:	/christine s woodard/	
DATE SIGNED:	01/18/2017	
Total Attachments: 5		
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CONFIRMATION OF AGREEMENT

REGARDING TRANSFER OF INTELLECTUAL AND PROPRIETARY RIGHTS TO PATENT(S)

1. PARTIES

Landegren Gene Technology AB, 556515-6725 hereinafter referred to as "the Company",

and

Ulf Landegren, 520608-1217, hereinafter referred to as "the Transferor".

2. BACKGROUND

2.1 The Company was set up to commercialize certain intellectual property rights belonging to the Transferor. The Transferor is a founder of the Company.

2.2 The Transferor possessed certain rights to patent(s)/patent application(s) as set out in Exhibit 1, hereinafter referred to as "the Patents".

2.2 During the period from February 14, 1996 until September 17, 2004, the Transferor transferred the rights to the IP as set out in Exhibit 1 to the Company in accordance with Exhibit 1.

3. CONFIRMATION OF ASSIGNMENT

3.1 This document is a confirmation of several assignment agreements (verbal and written) between the Transferor and the Company made during the period referred to in the previous section. According to the mentioned agreements, the Transferor irrevocably grants and assigns all rights in and to the Patents to the Company, as well as all results, improvements, discoveries or inventions that fall under the Patents or are related to the Patents ("Related IPR"). The assignment referred to in the previous phrase includes the right to sell, license or otherwise transfer the Patents or the Related IPR.

3.2 The Transferor also agreed to assist the Company in obtaining/maintaining patent rights and/or other intellectual property rights referring to the Patents and/or the Related IPR as long as this is possible under applicable law, and thereby sign such documents and take such other measures to create, maintain, transfer or otherwise dispose of the Patent(s) and/or the Related IPR, which is requested by the Company from time to time. This obligation shall survive the expiry/termination of this agreement. The costs and expenses connected with the procedures for obtaining and maintaining the Patent(s) and/or the Related IPR shall be borne by the Company.

4. TRANSFERORS WARRANTIES

4.1 The Transferor represents and warrants that its right to the Patent(s) and the Related IPR is complete and unrestricted.

5. COMPANYS RIGHTS TO ASSIGN THE TRANSFERRED IP RIGHTS

5.1 The Company have the unrestricted right to assign this entire agreement or separate IP rights received according to this agreement to a third party.

6. TERM

6.1 The obligations under section 3.2 above are valid as long as the Patens and/or the Related IPR are possible to protect under applicable law.

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7. **DISPUTE SETTLEMENT**

7.1 This agreement shall be governed by and construed under the substantive laws of Sweden.

7.2 Any dispute, controversy or claim arising out of or in connection with this agreement, or regarding any legal relations arising out of or in connection therewith, shall be finally settled by arbitration in accordance with the rules of the Arbitration Institute of the Stockholm Chamber of Commerce. The Arbitration Tribunal shall be composed of one arbitrator appointed by the Arbitration Institute.

This agreement has been executed in two (2) identical copies, of which each of the parties has taken one.

Place: UPPSALA

Place: UPPSALA

Date: DECEMBER 11, 2006

Date: DECEMBER 11, 2006

LANDEGREN GENE TECHNOLOGY AB


Ulf Landegren


Ulf Landegren

Vid

Uppsala, December 11, 2006



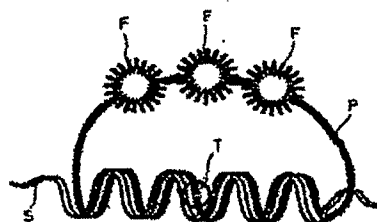
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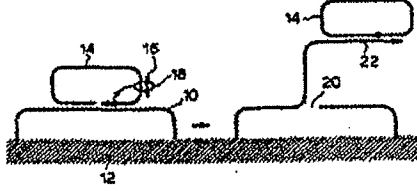
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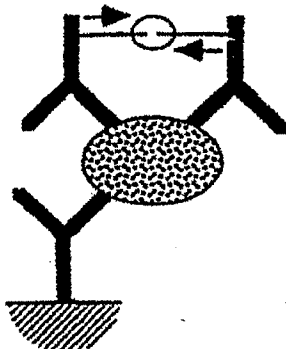
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Exhibit 1

IP transfer from Ulf Landegren to Landegren Gene technology AB

Patent id	Trivial name	Abstract
<p>WO9522623</p> <p>Patents US5871921 DE FR GB IT NL CH</p> <p>Application JP</p>	Padlock 1	<p>The invention relates to a method of detecting a target nucleic acid sequence in a sample by contacting the sample with a detectable probe to hybridize the probe to the target sequence, and detecting the hybridized probe. The method comprises the steps of: a) providing a detectable probe comprising two free nucleic acid end parts which are capable of hybridizing to two at least substantially neighbouring regions of the target sequence, b) hybridizing the probe ends to the target sequence under hybridizing conditions, c) covalently connecting the ends of the hybridized probe with each other to form a cyclized structure interlocking with the target molecule, d) subjecting the target sequence to non-hybridizing conditions and/or exonuclease activity to remove any non-cyclized probe from the target sequence, thereby retaining only the cyclized probe bound to the target molecule, e) optionally repeating steps b) to d) one or more times, and f) detecting the presence, and if desired, location of remaining labelled probe as indicative of the presence of the target nucleic acid sequence. The invention also relates to a detecting reagent or probe as well as a kit for use in the method.</p>  <p>LANDEGREN ULF (SE); KWIATKOWSKI MAREK (SE)</p>
<p>WO9741254</p> <p>Patents CH DE FR GB</p> <p>Applications US JP CA</p>	Padlock 2	<p>The present invention relates to improved methods for probing of specific nucleic acids using circularizable probes designed such that they report the presence of a target sequence by allowing a detectable moiety to remain bound if and only if the probe has been cyclized in a target-dependent linking reaction. The invention may be used for distinction between sequence specific variations of nucleic acids.</p> <p>LANDEGREN ULF (SE)</p>
<p>WO9709069</p> <p>Patents DE FR GB IT NL SE</p> <p>Applications US</p>	Padlock 3	<p>The present invention relates to methods and compositions for targeting nucleic acid sequences, more specifically double stranded nucleic acid sequences. The compositions comprise oligonucleotides in the form of padlock probes. The padlock probes have two free nucleic acid end parts which are at least partially complementary to and capable of hybridizing with two at least substantially neighboring respective regions of a target nucleic acid sequence. Furthermore, the invention relates to use of said compositions as medicaments for treating genetic disorders.</p> <p>LANDEGREN ULF (SE)</p>
<p>WO9949079</p> <p>Patents US6558928</p>	Padlock 4	<p>Rolling circle replication of a padlock primer is inhibited when it is hybridised to a target nucleic acid that is long or circular. The invention provides methods of addressing this problem including cutting the target nucleic acid near or preferably at the site which hybridises with the padlock probe, whereby a 3'-end of the cut target</p>

Applications US divisional 2003 CA EP JP		<p>nucleic acid acts as a primer for rolling circle replication of the padlock probe. Also included is a method for assaying for a polypeptidic target by the use of two affinity probes each carrying an oligonucleotide tag and of padlock probe for rolling circle replication in association with the two affinity probes.</p>  <p>LANDEGREN ULF (SE)</p>
WO03012119 Patents Applications US CA EP JP	Padlock 6	<p>A nucleic acid amplification method, and probes for use within the method are described.</p> <p>CLAIMS1. A method of analyzing circularized nucleic acids, by providing an amplification product, amplifying the said circularized DNA, which product comprises a concatemer of a sequence to be analyzed ; the method further comprising the steps of: a) directly detecting the said amplification product in a homogenous hybridization reaction using singly-or ratio-labeled probes, wherein the said homogenous hybridization detection is based on an enrichment of the detection probes in the said amplification product, and/or by using a modified molecular beacon design; or - b) carrying out a further signal generating reaction, comprising at least one of the following : I) providing a degradable signaling probe that is selectively degraded when it has hybridized to the said amplification product, wherein degraded probes dissociate from the said amplification product allowing further signaling probes to hybridize with the product, wherein hybridization and degradation of the probes effects a change in signal emitted by the probe.</p> <p>GULLBERG MATS (SE); LANDEGREN ULF (SE); NILSSON MATS (SE)</p>
WO03044229 Patents Applications US EP GB	Padlock 7	<p>This invention relates to methods, reagents and kits for enriching nucleic acid sequences. More particularly, the present invention relates to methods, reagents and kits for sample preparation including sample modification, sample enrichment and amplification</p> <p>CLAIMS 1. A method of enriching a preselected nucleic acid segment from a mixture of nucleic acid sequences, the preselected nucleic acid sequence encompassing a specific variant at a given position, the method comprising the steps of: (a) providing a nucleic acid mixture of sequences which includes the preselected nucleic acid segment to be enriched; (b) cleaving the nucleic acid sequences in the mixture to provide a nucleic acid fragment comprising the preselected nucleic acid segment; (c) providing a template oligonucleotide, one end of which hybridises to a sequence of the segment at or close to the variant position, and the other end of which hybridises to the end of a protecting sequence; (d) hybridising the template to the nucleic acid segment and to the protecting sequence such that the variant position and the end of the protecting sequence are brought into proximity of each other; (e) joining the end of the protecting sequence to the nucleic acid segment to form a ligated product, which ligated product is protected from degradation; and (f) enriching for the ligated sequence.</p> <p>GULLBERG MATS (SE); LANDEGREN ULF (SE)</p>
WO9700446 Patents DE69614539 D AU702125 SE0504798	Prox 1	<p>The present invention relates to an immunological test kit and immunoassay using a first immobilized antibody having affinity for a specific antigen. The invention is characterized by a second and third antibody being specific for different determinants of the antigen and modified with cross-linkable oligonucleotides. For detection, the oligonucleotides are amplified, whereby only such oligonucleotides will be amplified which have been cross-linked to each other. In this way unspecific background is avoided and detection is possible down to single molecules.</p>

CH FR GB IT Applications US CA JP		 LANDEGREN ULF (SE)
WO0161037 Patents SE Applications US AU CA EP JP	Prox 2	<p>The present invention relates to sensitive, rapid and convenient assays for detection and/or quantification of one or several analyte(s) in solution using so called proximity probes. The proximity probes comprise a binding moiety and a nucleic acid. The nucleic acid from one proximity probe is only capable of interaction with the nucleic acid from the other proximity probe when these are in close proximity, i.e. have bound to the analytes for which they are specific. The present invention relates to methods and kits for proximity probing and are performed in solution without the need of a solid phase.</p> <p>FREDRIKSSON SIMON (SE); LANDEGREN ULF (SE)</p>