

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
L	JONG MIN KIM ET AL: "Genotyping with CRISPR-Cas-derived RNA-guided endonucleases", NATURE COMMUNICATIONS, vol. 5, 1 January 2014 (2014-01-01), pages 1-7, XP055241559, DOI: 10.1038/ncomms4157 -----	1-16	INV. C12Q1/68 G01N33/574 G01N33/53
L	WO 2014/065596 A1 (TOOLGEN INC [KR]) 1 May 2014 (2014-05-01) -----		
A	HYONGBUM KIM ET AL: "A guide to genome engineering with programmable nucleases", NATURE REVIEWS GENETICS, vol. 15, no. 5, 2 April 2014 (2014-04-02), pages 321-334, XP055177064, ISSN: 1471-0056, DOI: 10.1038/nrg3686 -----		
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			TECHNICAL FIELDS SEARCHED (IPC) G01N
Place of search		Date of completion of the search	Examiner
Munich		9 November 2017	Behrens, Ralf
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

- Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):
- No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- All further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for all claims.
- As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- Only part of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- None of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the first mentioned in the claims, namely claims:
2, 13, 14, 16(completely); 1, 3-12, 15(partially)

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 2, 13, 14, 16(completely); 1, 3-12, 15(partially)

Method of claim 2.

2. claims: 1, 3-12, 15(all partially)

Method of claim 1 which does not mask the desired phenotype during cleavage, as claimed in claim 2.

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 15 80 0090

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

09-11-2017

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2014065596 A1	01-05-2014	AU 2013335451 A1	07-05-2015
		AU 2015218519 A1	17-09-2015
		AU 2017254854 A1	16-11-2017
		CA 2888190 A1	01-05-2014
		CN 104968784 A	07-10-2015
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US 2015344912 A1	03-12-2015		
WO 2014065596 A1	01-05-2014		

专利名称(译)	使用靶特异性核酸酶灵敏检测靶DNA的方法		
公开(公告)号	EP3150718A4	公开(公告)日	2018-03-28
申请号	EP2015800090	申请日	2015-05-28
[标]申请(专利权)人(译)	基因工具股份有限公司 基础科学研究院		
申请(专利权)人(译)	TOOLGEN INCORPORATED 机构基础科学		
当前申请(专利权)人(译)	TOOLGEN INCORPORATED 机构基础科学		
[标]发明人	KIM JIN SOO KIM SO JUNG LEE SEUNG HWAN KIM SEOK JOONG		
发明人	KIM, JIN SOO KIM, SO JUNG LEE, SEUNG HWAN KIM, SEOK JOONG		
IPC分类号	C12Q1/68 G01N33/574 G01N33/53		
CPC分类号	C12Q1/6844 C12Q1/68 C12Q2521/301 G01N33/53 G01N33/574		
代理机构(译)	安德鲁斯, ROBERT		
审查员(译)	BEHRENS, RALF		
优先权	1020140064526 2014-05-28 KR		
其他公开文献	EP3150718A1		
外部链接	Espacenet		

摘要(译)

本发明涉及使用靶特异性核酸酶分析基因型的方法，具体涉及使用靶特异性核酸酶或其变体通过去除野生型DNA或特定基因型DNA来诊断癌症或分析基因型的方法仅扩增或浓缩少量具有变异差异的突变或基因型的DNA，以及用于分离靶向特异性核酸酶或其变体的靶DNA的方法。这种方法是与现有的简单靶特异性核酸酶相反的新型范式方法，用于正常基因型和致癌基因型的PCR后识别，并且可以有利地用于癌症的早期诊断或类似基因型的分析。

DOCUMENTS CONSIDERED TO BE RELEVANT		Reference to citation	CLASSIFICATION OF THE APPLICATION (IPC)
L	JONG HIB KIM ET AL: "Genotyping with CRISPR-Cas-derived RNA-guided endonucleases". NATURE COMMUNICATIONS, vol. 5, 1 January 2014 (2014-01-01), pages 1-7, XP055241559, DOI: 10.1038/ncomms4157		1B1 C12Q1/68 G01N33/574 G01N33/53
L	WO 2014/065596 A1 (TOOLGEN INC [KR]) 1 May 2014 (2014-05-01)		
A	HYONGRUM KIM ET AL: "A guide to genome engineering with programmable nucleases". NATURE REVIEWS GENETICS, vol. 15, no. 5, 2 April 2014 (2014-04-02), pages 331-334, XP055177064, ISSN: 1471-0056, DOI: 10.1038/nrg3686	1-16	
<p>The supplementary search report has been based on the last set of documents available at the start of the search.</p> <p>Place of search: Munich 9 November 2017 Examiner: Behrens, Ralf</p>			
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X: previously relevant document</p> <p>L: document of the same patent family with another international publication</p> <p>TD: document of the same patent family, corresponding intermediate document</p>		<p>1: priority or parent document, the invention, or</p> <p>2: document cited in the application</p> <p>3: document cited for other reasons</p> <p>4: document of the same patent family, corresponding document</p>	