

Title (en)  
METHODS AND SYSTEMS FOR NUCLEIC ACID PROCESSING

Title (de)  
VERFAHREN UND SYSTEME ZUR NUKLEINSÄURENVERARBEITUNG

Title (fr)  
PROCÉDÉS ET SYSTÈMES DE TRAITEMENT D'ACIDES NUCLÉIQUES

Publication  
**EP 4107286 A4 20240424 (EN)**

Application  
**EP 21757375 A 20210218**

Priority  
• US 202062978735 P 20200219  
• US 2021018558 W 20210218

Abstract (en)  
[origin: WO2021168097A1] Disclosed herein is a method for nucleic acid amplification. The systems and methods described herein provide for amplifying both target and non-target oligonucleotides on an array where there may be a multitude of target and non-target oligonucleotides. The targeting of oligonucleotides to their complementary strands is performed using a specific flow rate on the array. The method of amplification may block amplification of the non-target oligonucleotides and may generate amplicons of the target immobilized at the reaction site at a rate sufficient to generate amplicons without amplification of other targets on the array. The methods and compositions described herein may provide a more efficient methods and mechanisms of nucleic acid amplification.

IPC 8 full level  
**C12Q 1/6848** (2018.01); **C12Q 1/6806** (2018.01); **C12Q 1/6874** (2018.01)

CPC (source: EP)  
**C12Q 1/6806** (2013.01); **C12Q 1/6874** (2013.01)

C-Set (source: EP)  
1. **C12Q 1/6874** + **C12Q 2531/113** + **C12Q 2563/107** + **C12Q 2563/149** + **C12Q 2565/607** + **C12Q 2565/629**  
2. **C12Q 1/6806** + **C12Q 2531/113** + **C12Q 2535/122** + **C12Q 2563/107** + **C12Q 2563/149** + **C12Q 2565/50** + **C12Q 2565/607** + **C12Q 2565/629**

Citation (search report)  
• [XYI] WO 2016075204 A1 20160519 - ILLUMINA INC [US], et al  
• [XYI] US 2018023119 A1 20180125 - ADEY ANDREW C [US], et al  
• [XYI] WO 2013158313 A1 20131024 - LIFE TECHNOLOGIES CORP [US]  
• [XYI] WO 2019222688 A1 20191121 - ILLUMINA INC [US], et al  
• [A] K. V. VOELKERDING ET AL: "Next-Generation Sequencing: From Basic Research to Diagnostics", CLINICAL CHEMISTRY, vol. 55, no. 4, 26 February 2009 (2009-02-26), pages 641 - 658, XP055057879, ISSN: 0009-9147, DOI: 10.1373/clinchem.2008.112789  
• See also references of WO 2021168097A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2021168097 A1 20210826**; EP 4107286 A1 20221228; EP 4107286 A4 20240424

DOCDB simple family (application)  
**US 2021018558 W 20210218**; EP 21757375 A 20210218