

Title (en)

METHOD AND DEVICE FOR DETERMINING THE NUMBER OF COPIES OF A DNA SEQUENCE THAT IS PRESENT IN A FLUID

Title (de)

VERFAHREN UND VORRICHTUNG ZUM ERMITTELN EINER IN EINEM FLUID ENTHALTENEN KOPIENANZAHL EINER DNA-SEQUENZ

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR DÉTERMINER LE NOMBRE DE COPIES D'UNE SÉQUENCE D'ADN PRÉSENTES DANS UN FLUIDE

Publication

EP 4077724 A1 20221026 (DE)

Application

EP 20835768 A 20201217

Priority

- DE 102019220020 A 20191218
- EP 2020086752 W 20201217

Abstract (en)

[origin: CA3161507A1] The invention relates to a method (100) for determining the number of copies of (300) of a DNA sequence that is present in a fluid, wherein the method (100) comprises a division step (102), a setting up step (105), an identification step (110) and an evaluation step (115). In the division step (102), at least some of the fluid is divided into at least two compartments. In the setting up step (105), a reaction condition is set up for the fluid divided into the at least two compartments in order to allow a reaction in each of the at least two compartments and to obtain a reaction result in each case. In the identification step (110), a signal, for example an optical signal, is identified that represents the reaction results of the reactions that may have taken place in the compartments. In the evaluation step (115), the optical signal is evaluated in order to determine the number of copies, taking into account the statistical distribution of the copies across the compartments and taking into account a reaction-specific detection probability function which indicates the probability that an amplification reaction has taken place in a compartment, according to the number of copies initially present in the compartment.

IPC 8 full level

C12Q 1/6851 (2018.01)

CPC (source: EP KR US)

C12Q 1/6851 (2013.01 - EP KR US); **C12Q 1/6848** (2013.01 - US); **C12Q 2537/16** (2013.01 - KR); **C12Q 2537/165** (2013.01 - KR); **C12Q 2545/114** (2013.01 - KR); **C12Q 2600/16** (2013.01 - US)

C-Set (source: EP)

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DOCDB simple family (publication)

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DE 102019220020 A 20191218; CA 3161507 A 20201217; CN 202080086669 A 20201217; EP 2020086752 W 20201217; EP 20835768 A 20201217; JP 2022537635 A 20201217; KR 20227023934 A 20201217; US 202017757466 A 20201217