

Title (en)  
PROCESS FOR DETECTING AND QUANTIFYING NUCLEIC ACID MOLECULES

Title (de)  
VERFAHREN ZUR ERFASSUNG UND QUANTIFIZIERUNG VON NUCLEINSÄURE-MOLEKÜLEN

Title (fr)  
PROCEDE DE DETECTION ET DE QUANTIFICATION DE MOLECULES D'ACIDE NUCLEIQUE

Publication  
**EP 0873427 B8 20021106 (DE)**

Application  
**EP 97906982 A 19970107**

Priority  
• DE 9700008 W 19970107  
• DE 19600362 A 19960108

Abstract (en)  
[origin: US6306592B1] The invention relates to a method of detecting and identifying nucleic acid (NA) molecules within a population (I) of NA molecules of identical, similar or different sequence, in which: (a) the single-stranded or duplex ribonucleic acid (RNA) molecules or single-stranded deoxyribonucleic acid (DNA) molecules contained in a population (I) are converted into a population (II) of duplex DNA molecules; b) the population (II) of duplex DNA molecules is subjected to denaturation and subsequent renaturation, so that a mixture of homo- and heteroduplex DNA molecules is present; c) heteroduplexes formed in the population (II) where unpaired or incorrectly paired nucleotides are present are reacted chemically with a carbodiimide compound; and d) the resulting carbodiimide reactions products are characterized and quantified, characterized in that a chromatographic purification method is carried out between each of the steps a to d.

IPC 1-7  
**C12Q 1/68**; **G01N 33/53**

IPC 8 full level  
**C12N 15/09** (2006.01); **C12Q 1/68** (2006.01); **C12Q 1/6827** (2018.01); **G01N 33/53** (2006.01)

CPC (source: EP US)  
**C12Q 1/6827** (2013.01 - EP US); **Y10T 436/143333** (2015.01 - EP US)

C-Set (source: EP US)  
1. **C12Q 1/6827** + **C12Q 2537/113** + **C12Q 2527/107** + **C12Q 2521/514**  
2. **C12Q 1/6827** + **C12Q 2537/113** + **C12Q 2533/101** + **C12Q 2527/107**

Designated contracting state (EPC)  
AT BE CH DE FR GB IE LI

DOCDB simple family (publication)  
**US 6306592 B1 20011023**; AT E222963 T1 20020915; CA 2241185 A1 19970717; DE 19600362 A1 19970710; DE 19600362 C2 19981112; DE 59708066 D1 20021002; EP 0873427 A2 19981028; EP 0873427 B1 20020828; EP 0873427 B8 20021106; JP 2000502907 A 20000314; WO 9725441 A2 19970717; WO 9725441 A3 19970925

DOCDB simple family (application)  
**US 10172498 A 19981202**; AT 97906982 T 19970107; CA 2241185 A 19970107; DE 19600362 A 19960108; DE 59708066 T 19970107; DE 9700008 W 19970107; EP 97906982 A 19970107; JP 52474497 A 19970107