

Title (en)
APPARATUS FOR RAPID PCR ANALYSIS

Title (de)
VORRICHTUNG ZUR SCHNELLEN PCR-ANALYSE

Title (fr)
APPAREIL D'ANALYSE PCR RAPIDE

Publication
EP 4292714 A1 20231220 (EN)

Application
EP 22179190 A 20220615

Priority
EP 22179190 A 20220615

Abstract (en)
The present invention relates to a PCR apparatus for nucleic acid amplification comprising four main modules - a power supply module, a temperature module, fluorescence excitation-detection module, control module wherein the temperature module contains thermocyclic plate made of graphite allowing to achieve higher heating/cooling speeds for faster polymerase chain reactions and allowing to form reaction products more quickly. Graphite is a material with high thermal conductivity and low specific heat capacity making it suitable for ultra-fast temperature changes.

IPC 8 full level
B01L 7/00 (2006.01); **B01L 9/06** (2006.01); **C12Q 1/68** (2018.01)

CPC (source: EP)
B01L 7/52 (2013.01); **B01L 9/06** (2013.01); **B01L 2300/0654** (2013.01); **B01L 2300/1822** (2013.01)

Citation (applicant)
CN 203921614 U 20141105 - HANGZHOU BIOER TECHNOLOGY CO LTD

Citation (search report)
• [XY] EP 1710017 A1 20061011 - ROCHE DIAGNOSTICS GMBH [DE], et al
• [XY] WO 2010115160 A2 20101007 - HELIXIS INC [US], et al
• [Y] US 2008182301 A1 20080731 - HANDIQUE KALYAN [US], et al
• [A] KIKUTA Y ET AL: "Expression and molecular cloning of human liver leukotriene B4 omega-hydroxylase (CYP4F2) gene", DNA AND CELL BIOLOGY, MARY ANN LIEBERT, NEW YORK, NY, US, vol. 18, no. 9, 1 September 1999 (1999-09-01), pages 723 - 730, XP002223185, ISSN: 1044-5498, DOI: 10.1089/104454999315006

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

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4292714 A1 20231220

DOCDB simple family (application)
EP 22179190 A 20220615