

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  
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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

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KH MA MD TN

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