

Title (en)
DEVICE FOR THERMAL CONVECTION POLYMERASE CHAIN REACTION

Title (de)
VORRICHTUNG FÜR POLYMERASEKETTENREAKTIONEN MIT THERMISCHER KONVEKTION

Title (fr)
DISPOSITIF À CONVECTION THERMIQUE POUR UNE RÉACTION EN CHAÎNE DE LA POLYMÉRISE

Publication
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Application
EP 11876152 A 20111122

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Abstract (en)
[origin: EP2784150A1] Provided in the present invention is a device (10) for thermal convection polymerase chain reaction (PCR). The device (10) is used for bearing a heat radiating base (20) which has a body (22) and a passage (24) provided through the body (22) to be used for the insertion of the test tube (12), wherein the passage (24) has a large diameter section (241) and a small diameter section (242) positioned below the large diameter section (241). Therefore, it can be ensured that during the PCR process the surface temperature of the mixed liquid is lower than the temperature required in a primer annealing reaction.

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Citation (search report)

- [X] WO 2011086498 A2 20110721 - AHAM BIOSYSTEMS INC [KR], et al
- [X] US 2008229849 A1 20080925 - DOEBLER ROBERT W [US], et al
- [X] US 5616301 A 19970401 - MOSER ROLF [CH], et al
- [A] US 2010285536 A1 20101111 - HWANG HYUN JIN [KR], et al
- See references of WO 2013075263A1

Cited by
CN105670924A; JP2018126125A; US10688497B2

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