

Title (en)
Improvements in thermal cycler for pcr

Title (de)
Thermo-Zyklus-Vorrichtung zur Ausführung der Polymerase-Kettenreaktion

Title (fr)
Améliorations apportées à un cycleur thermique pour PCR

Publication
EP 1386666 B1 20121114 (EN)

Application
EP 03022672 A 19980330

Priority

- EP 01112394 A 19980330
- EP 98913265 A 19980330
- US 4175497 P 19970328
- US 4612297 P 19970509

Abstract (en)
[origin: EP1386666A1] An instrument for performing highly accurate PCR employing an assembly, a heated cover and an internal computer. The assembly is made up of a simple block, a number of Peltier thermal electric devices and heat sink, clamped together. The sample block temperature is changed exclusively by the thermoelectric devices controlled by the computer. The sample block is of low thermal mass and is constructed of silver. The Peltier devices are designated to provide fast temperature excursions over a wide range. The heat sink has a perimeter trench to minimize edge losses and is adjacent to a continuously variable fan. A perimeter heater is used to improve the thermal uniformity across the sample block to approximate +/-0.2 DEG C. <IMAGE>

IPC 8 full level
B01L 7/00 (2006.01); **C12Q 1/68** (2006.01); **F25B 21/02** (2006.01); **G01R 27/20** (2006.01); **H10N 10/10** (2023.01)

CPC (source: EP)
B01L 7/52 (2013.01); **B01L 2300/0829** (2013.01); **B01L 2300/1822** (2013.01); **B01L 2300/1827** (2013.01)

Cited by
EP1809957A4; EP2198968A1; CN115505525A; US8271230B2; WO2023031247A1

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