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(71) Applicants (for all designated States except US):
**AGENCY FOR SCIENCE, TECHNOLOGY AND
RESEARCH** [—/SG]; 20 Biopolis Way, #07-01 Centros,
Singapore 138668 (SG). **NATIONAL UNIVERSITY
OF SINGAPORE** [—/SG]; 10 Kent Ridge Crescent,
Singapore 119260 (SG).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MIAO, Yubo**
[SG/SG]; Block 227, Chua Chu Kang Central, #08-183,

Singapore 680227 (SG). **CHEN, Yu** [CN/SG]; Block 144,
Upper Bukit Timah Road, #16-01, Singapore 588177 (SG).
LIM, Tit, Meng [SG/SG]; 7 Toh Tuck Place, Singapore
596783 (SG). **HENG, Chew, Kiat** [SG/SG]; Block 430
Ang Mo Kio Ave 3, #25-2594, Singapore 560430 (SG).

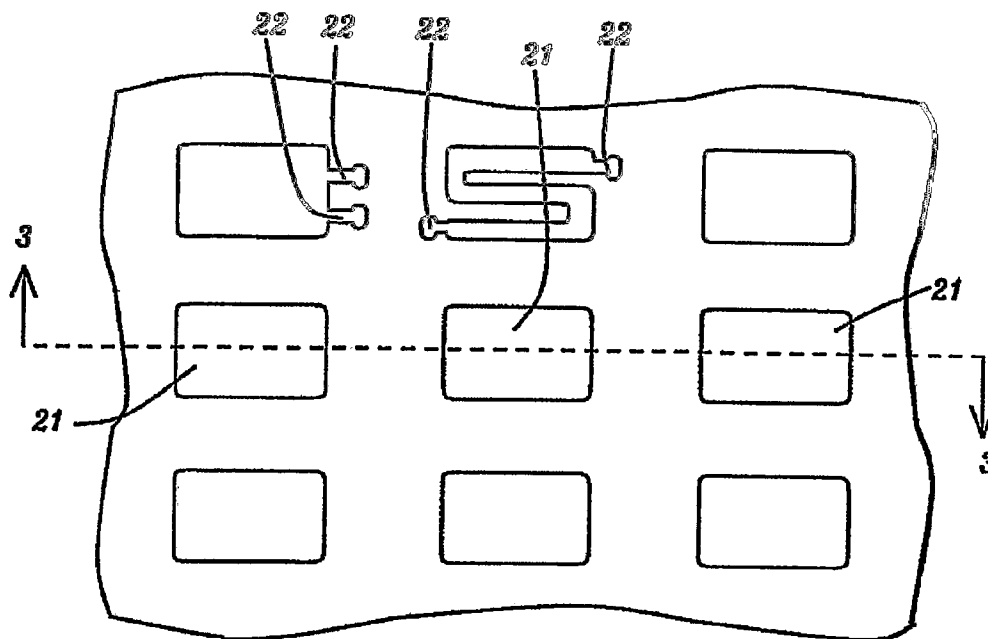
(74) Agent: **VIERING, JENTSCHURA & PARTNER**; Ro-
chor Post Office, Rochor Road, P.O. Box 1088, Singapore
911833 (SG).

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(54) Title: SHALLOW MULTI-WELL PLASTIC CHIP FOR THERMAL MULTIPLEXING



(57) Abstract: Disposable units in current use for performing PCR are limited by their heat block rates and by the thermal diffusion delay time through the plastic wall as well as by the sample itself. This limitation has been overcome by forming a disposable plastic chip using a simple deformation process wherein one or more plastic sheets are caused, through hydrostatic pressure, to conform to the surface of a suitable mold. After a given disposable chip has been filled with liquid samples, it is brought into close contact with an array of heating blocks that seals each sample within its own chamber, allowing each sample to then be heat treated as desired.

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