

(19)



Europäisches Patentamt

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(11)

**EP 1 316 360 A3**

(12)

**EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**02.01.2004 Bulletin 2004/01**

(51) Int Cl.7: **B01L 3/00**

(43) Date of publication A2:  
**04.06.2003 Bulletin 2003/23**

(21) Application number: **03004805.2**(22) Date of filing: **20.07.2000**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
 MC NL PT SE**

(30) Priority: **23.07.1999 US 145381**  
**19.07.2000 US 619116**

(62) Document number(s) of the earlier application(s) in  
 accordance with Art. 76 EPC:  
**00948823.0 / 1 198 293**

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(54) **Fabrication methods for thin-well microplate**

(57) A thin-well microplate and methods of manufacturing same are provided, wherein the thin-well microplate is conducive for use with automated equipment, and in high temperature procedures. The thin-well microplate is constructed of two components including a skirt and frame portion (11) and a well and deck portion (12) with a plurality of sample wells; both portions being joined to form a unitary microplate. The skirt and frame portion and the well and deck portion are each constructed of the material that will allow each portion to withstand high temperature conditions and use of automated equipment, while retaining the physical characteristics each portion requires for optimal performance of the thin-well microplate. Such physical characteristics include rigidity of the skirt and frame portion and thin-walled sample wells of the well and deck portion to permit optimal thermal transfer and biocompatibility. Methods of construction include forming the thin-well microplate as a unitary plate in a single, two-step process, wherein the skirt and frame portion is constructed of a suitable first material in a first step and the deck and frame portion is formed integral with the skirt and frame portion in a second step of a suitable second material. Another method of construction includes forming the unitary thin-well microplate in two separate manufacturing processes, wherein the skirt and frame portion is constructed of the first material in a first process and the deck and well portion constructed of the second material

in a second process, those portions being thereafter, permanently joined by an adhesive system to form the unitary plate.

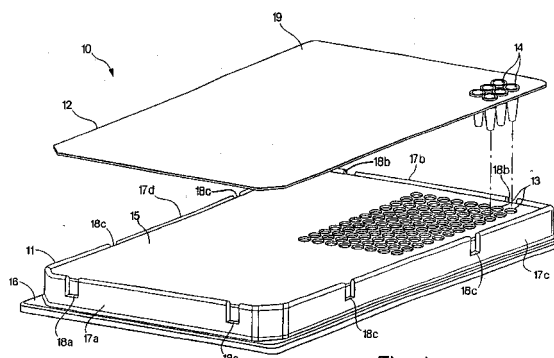


Fig. 1

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## EUROPEAN SEARCH REPORT

Application Number  
EP 03 00 4805

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The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>3 November 2003</b>	Examiner <b>Koch, A</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	

EPO FORM 1503 03 82 (P04C01)



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Application Number  
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CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 (03.82) (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
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