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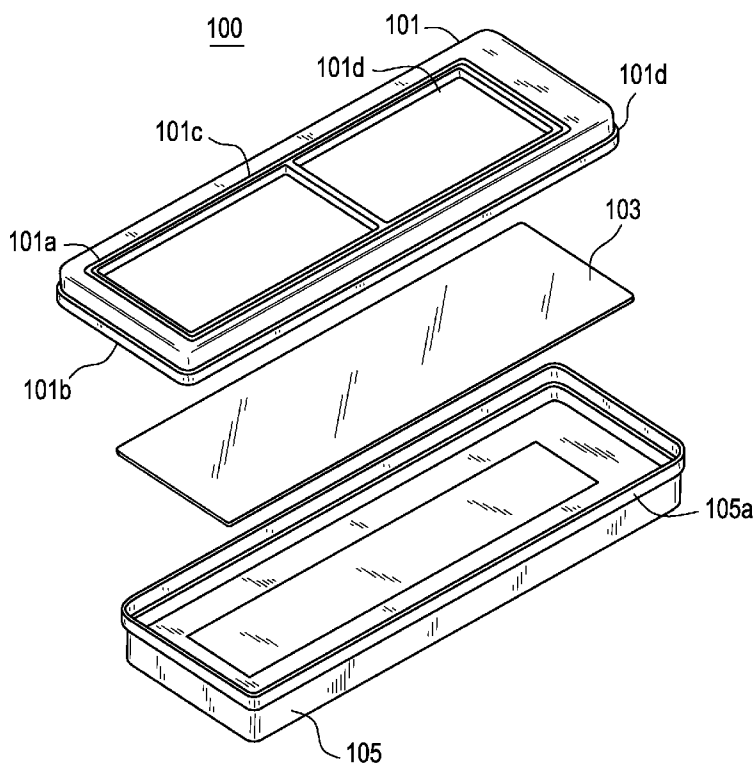
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[Continued on next page]

(54) Title: CHAMBER APPARATUS



(57) Abstract: This invention provides a system that allows a user to assemble a chamber apparatus (100) that prohibits samples from leaking or mixing with other samples or chamber array wells, when they are inserted into an array well of the chamber apparatus (100). In addition, the chamber frame (101) design allows for easy assembly and disassembly for simplified use and slide substrate (103) scanning on conventional microarray scanners. Chamber apparatus (100) includes a chamber frame (101) with an upper integrated gasket (101a) and a lower integrated gasket (101b), a substrate, and a substrate frame (105) that positions and captures the substrate (103). The lower integrated gasket (101b) provides a single sealing surface between the chamber frame (101) and the substrate (103). The upper integrated gasket (101a) interfaces with a chamber cover (611) forming a compression seal that prevents sample loss due to evaporation during the hybridization process. The chamber frame (101) and substrate frame (105) have integrated features (105a) that allow them to align and fasten to each other by latching or snapping resulting in an optimal clamping force to produce a compression seal between the integrated

lower gasket (101b) and the substrate (103).

WO 2008/002951 A3



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INTERNATIONAL SEARCH REPORT

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 103 29 983 A1 (SIEMENS AG [DE]) 31 March 2005 (2005-03-31) paragraphs [0003] - [0011] paragraphs [0025] - [0027]; figure 2	1-29
X	US 2005/135974 A1 (HARVEY MICHAEL A [US] ET AL) 23 June 2005 (2005-06-23) paragraph [0038] paragraphs [0042], [0043]; figures 3-6 paragraph [0046]; figure 10	1-29
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A	EP 1 652 580 A (AFFYMETRIX INC [US]) 3 May 2006 (2006-05-03) paragraphs [0064] - [0069]	1-29



Further documents are listed in the continuation of Box C.



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INTERNATIONAL SEARCH REPORT

Information on patent family members

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