(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
15 May 2003 (15.05.2003)

PCT

(10) International Publication Number
WO 2003/041154 A3

(51) International Patent Classification[7]: H01L 21/58, 21/56

(21) International Application Number: PCT/IB2002/004655

(22) International Filing Date: 6 November 2002 (06.11.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
01/14577 7 November 2001 (07.11.2001) FR

(71) Applicant *(for all designated States except US)*: **SCHLUMBERGER SYSTEMES** [FR/FR]; 50, avenue Jean Jaurès, F-92120 Montrouge (FR).

(71) Applicant *(for MC only)*: **SCHLUMBERGER MALCO, INC.** [US/US]; 9800 Reistertown Road, Owing Mills, MD 21117 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **BONVALOT, Béatrice** [FR/FR]; 22, rue du Royaume, F-91440 Bures Sur Yvette (FR). **BARBE, Sylvie** [FR/FR]; 7, rue de la Grande Vallée, F-91150 Puiselet Le Marais (FR). **LEMOULLEC, Laurent** [FR/FR]; 7, Impasse l'Astrolabe, F-75015 Paris (FR). **LEYDIER, Robert** [FR/FR]; 5, allée des Planches, F-91400 Orsay (FR).

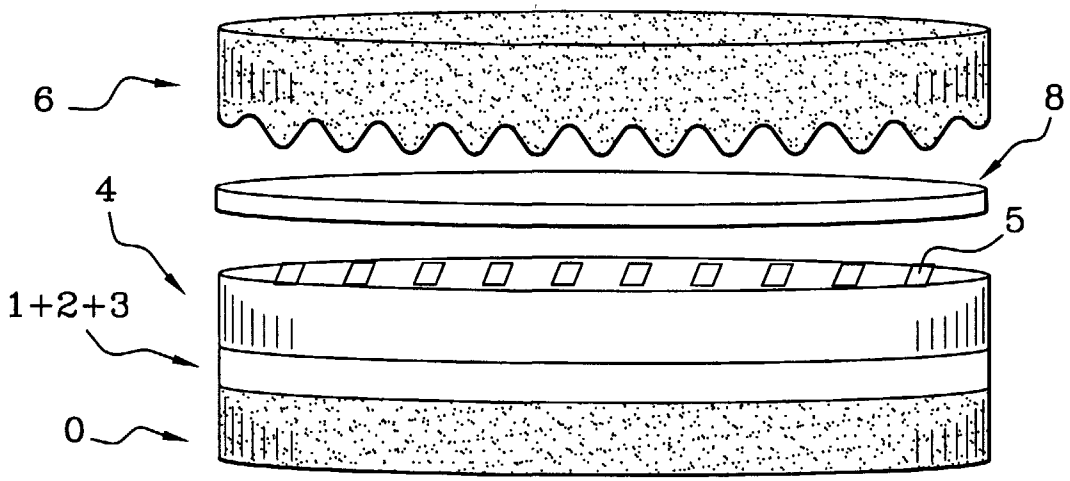
(74) Common Representative: **YQUEL, Vincent**; Schlumberger Systèmes, 50, avenue Jean Jaurès, F-92120 Montrouge (FR).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,

[Continued on next page]

(54) Title: A METHOD OF MANUFACTURING A PLURALITY OF ASSEMBLIES



(57) Abstract: A plurality of assemblies is manufactured. Each assembly comprises a sealing slice that is fixed to a base slice. The plurality of assemblies is manufactured in the following manner. In a preparation step, a stack is formed. The stack comprises a plurality of pre-assemblies. Each pre-assembly comprises a base slice, a sealing slice and a fixing layer provided between the base slice and the sealing slice. The stack further comprises at least one supple buffer layer. The supple buffer layer has a mechanical rigidity, which is substantially less than that of the base slices and that of the sealing slices. The supple buffer layer thus enables to compensate for variations in thickness of the base slices and of the sealing slices. In a fixing step, the stack is pressed which causes the sealing slice of each pre-assembly to be fixed to the base-slice of the pre-assembly.

WO 2003/041154 A3

ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— *of inventorship (Rule 4.17(iv)) for US only*

Published:

— *with international search report*

(88) Date of publication of the international search report:
27 May 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.