



(51) International Patent Classification:
A61M 5/158 (2006.01) *A61M 39/24* (2006.01)

(21) International Application Number:
PCT/EP2021/071797

(22) International Filing Date:
04 August 2021 (04.08.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10 2020 209 931.6
06 August 2020 (06.08.2020) DE

(71) Applicant: **B. BRAUN MELSUNGEN AG** [DE/DE];
Carl-Braun-Strasse 1, 34212 Melsungen (DE).

(72) Inventors: **KLAAS, Stefan**; Schulstrasse 46, 36251 Ludwigsau (DE). **SCHNEIDER, Uwe Erik**; Hauptstrasse 44, 34286 Spangenberg (DE). **PALA SANDARAM, Kavintharan**; 49 Cangkat Sungai Ara 4, Sungai Ara, Bayan Lepas, Penang, 11900 (MY). **SOON, Wei Jin**; 16-12A-01, Serina Bay, Hilir Sungai Pinang, Penang, 11600 (MY). **TAN, Aik Aun**; 2-22-8, Boulevard, Solok Thean Teik, Penang, 11500 (MY). **GOH TEE LIANG, Jeremy**; A-21-06 Setia Sky Vista, Lebuh Relau 9, Bayan Lepas, P.Pinang, 11900 (MY). **TEOH, Hui Kuun**; 59, Lorong Rajawali 1, Sathu Terraces, Bayan Lepas, Penang, 11900 (MY).

(74) Agent: **PATENTANWÄLTE RUFF, WILHELM, BEIER, DAUSTER & PARTNER MBB**; Kronenstraße 30, 70174 Stuttgart (DE).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

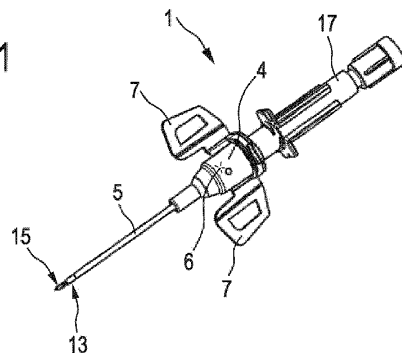
(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: CATHETER ARRANGEMENT INCLUDING A VALVE ELEMENT ELASTICALLY DEFORMABLE BY FLUID PRESSURE

Fig. 1



(57) Abstract: 1. Catheter arrangement 2.1 A catheter arrangement of this type comprising a catheter, which has a hollow housing body, a tube element fitted onto a distal end of the housing body, a valve element which is arranged in the housing body and is provided with a fluid passage, and a fluid-conducting path which is made to extend through the housing body, the fluid passage and the tube element between a proximal inlet side and a distal outlet side, and comprising a hollow needle which, in a state of readiness of the catheter arrangement, is made to extend longitudinally through the fluid-conducting path, and which, in a state of use of the catheter arrangement, is drawn out of the fluid-conducting path in the proximal direction, is known. 2.2 According to the invention, the valve element has an elastic wall portion through which the fluid passage is made to extend, wherein the wall portion is elastically deformable under the action of a fluid pressure, wherein the fluid passage - in the state of use of the catheter arrangement - can be shifted by means of a fluid-pressure-induced elastic deformation of the wall portion between an open state, in which the fluid passage is open, and a closed state, in which the fluid passage is closed. 2.3 Use in infusion therapy.