



(51) International Patent Classification:
B01F 5/06 (2006.01) **B01F 15/02** (2006.01)
B01F 13/10 (2006.01)

(21) International Application Number:
PCT/EP2020/083272

(22) International Filing Date:
25 November 2020 (25.11.2020)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
19306541.4 29 November 2019 (29.11.2019) EP

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(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,

(54) Title: MULTI-BRANCH STATIC MIXERS

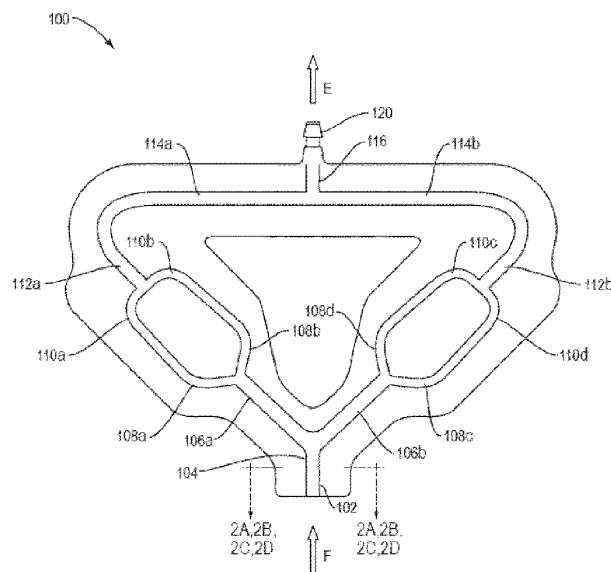


FIG. 1

(57) Abstract: A static mixer (100), comprising a static mixer housing, having an inlet port (120) for receiving a fluid, a channel (104) in fluid communication with the inlet port (120), a raised rib along a perimeter of the channel (104), a flow splitter for splitting the fluid into a first stream (106a) and a second stream (106b) within channels, a second flow splitter for splitting the first stream (106a) into a third stream (110a) and a fourth stream (110b) within channels and a third flow splitter for splitting the second stream (106b) into a fifth stream (110c) and a sixth stream (110d) within channels, a first T-style junction for rejoining and mixing the third stream and the fourth stream within a channel (112a), a second T-style junction for rejoining and mixing the fifth stream and the sixth stream within a channel (112b), and a third T-style junction for rejoining and mixing the streams; and a plastic film, the plastic film sealed to the raised rib, forming a static mixer (100) capable of mixing the fluid while remaining in a state of laminar flow.

[Continued on next page]

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))*