

Title (en)
FLANGE

Title (de)
FLANSCH

Title (fr)
BRIDE

Publication
EP 3928018 A4 20220518 (EN)

Application
EP 20759574 A 20200218

Priority
• RU 2019104996 A 20190221
• RU 2020000077 W 20200218

Abstract (en)
[origin: WO2020171739A1] The plastic flange contains the central section (1) with the flow hole (2) and the connecting fitting (7), made integral with the annular peripheral section (3), on which there are holes (4) for fasteners and radial stiffeners (5) are made located around the central section (1) on one side of the flange. On the other side of the flange there are concentrically arranged the outer mounting ring (14) on the outer edge of the peripheral section (3) and the stop collar (6) around the central section (1). The central section (1) is made convex, for example, of a spherical shape (a hollow sphere segment) or of a convex conical shape (a truncated hollow cone part) and averted with convex from the connecting fitting (7). A pipe manifold or a main pipeline of water supply arrangements is connected to the fitting 7 in conventional manner. The pass of the fitting (7) is connected to the flow hole (2) of the central section (1). The flange is made of glass-filled polypropylene. On the peripheral section (3) between the holes (4) for the fasteners the arcuate stiffeners (8) are made. Between each adjacent holes (4) for fasteners one arcuate stiffener (8) and two radial stiffeners (5) are made. Radial and arcuate stiffeners (5,8) are made of different heights and connected together at the intersections. The monolithic plastic flange made of glass-filled polypropylene has such advantages as increased bearing capacity, as well as reliability and durability, lower cost of foundry, stainlessness, lower weight.

IPC 8 full level
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CPC (source: EP)
F15B 1/10 (2013.01); **F16L 23/0286** (2013.01); **F16L 23/032** (2013.01); **F15B 2201/205** (2013.01); **F15B 2201/3151** (2013.01); **F15B 2201/3152** (2013.01); **F15B 2201/41** (2013.01); **F16L 47/14** (2013.01)

Citation (search report)
• [A] JP 2013044358 A 20130304 - SEKISUI CHEMICAL CO LTD
• [A] WO 2009136301 A2 20091112 - ZILMET SPA [IT], et al
• [A] US 7013925 B1 20060321 - SAVELIEV MICHAEL [US], et al
• See references of WO 2020171739A1

Designated contracting state (EPC)
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