

Title (en)
FLEXIBLE PIPELINE

Title (de)
FLEXIBLE ROHRLEITUNG

Title (fr)
CANALISATION SOUPLE

Publication
EP 3924658 A4 20221102 (EN)

Application
EP 20756329 A 20200207

Priority
• RU 2019103962 A 20190212
• RU 2020000061 W 20200207

Abstract (en)
[origin: WO2020167165A2] The flexible pipeline contains elastic hose (1) with external reinforcing spiral winding (14), connecting fittings at each end of the elastic hose in the form of a through connecting outlet or input fittings (3, 4), respectively, and one of two identical couplings (2). Corresponding end of hose (1) is sealed between each connecting pipe (3, 4) and coupling (2). Each coupling (2) is hollow with internal spiral groove (10) along the longitudinal axis of symmetry of coupling (2). Spiral groove (10) of coupling (2) has a turn pitch equal to the turn pitch of spiral winding (14) of the hose. Each end of hose (1) is screwed completely into coupling (2). Each connecting pipe (3) and (4) is made with a cylindrical surface, pressed coaxially into coupling (2) into the corresponding end of elastic hose (1) in the area of the latter screwed into coupling (2), and with the threaded part protruding outward. At the same time, at each end of elastic hose (1), connecting pipe (3 or 4) and corresponding coupling (2) are fixed from mutual movement by means of retaining ring (5) installed in a groove made on the outer surface of connecting pipe (3 and 4) and protruding into windows (13) made in coupling 2 wall. The cylindrical surface for pressing in each connecting pipe (4, 5) is made inclined with conical protrusions. Elastic hose (1) is made of plasticized food-grade polyvinyl chloride and with external spiral wire winding (14) made of polyvinyl chloride (PVC). The retaining ring (5) is made split of the spring material, with flat side surfaces supported on walls (10, 11) of the windows of coupling (2) and with a cut, which ends protrude into window (13) made in coupling (2) wall. The advantage is durability, since the hose is reliably sealed between the coupling and the connecting pipe, as well as the convenience and speed of installation of the pipeline.

IPC 8 full level
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Citation (search report)
• [A] US 2017097111 A1 20170406 - DE NORA PAOLO [IT]
• [A] US 2014353965 A1 20141204 - INOUE YOSHINORI [JP], et al
• [A] DE 4429504 C1 19951005 - RASMUSSEN GMBH [DE]
• [A] US 5687994 A 19971118 - HANSEN ALBERT FREDERICK [NZ]
• See references of WO 2020167165A2

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