

Title (en)
ENERGIZED RESTRAINING GASKET FOR MECHANICAL JOINTS OF PIPES

Title (de)
ERREGTE HALTEDICHTUNG FÜR MECHANISCHE ROHRVERBINDUNGEN

Title (fr)
JOINT D'ENCASTREMENT SOLLICITE POUR RACCORDS MECANQUES DE TUYAUX

Publication
EP 1673568 A2 20060628 (EN)

Application
EP 03774835 A 20031015

Priority
US 0332648 W 20031015

Abstract (en)
[origin: WO2005047745A2] The present invention may be basically described as a gasket for converting a standard mechanical joint into a restrained mechanical joint without the need for altered configuration of the bell, spigot, or gland of the joint, and without the need for additional fittings or devices. In the practice of the present invention, a standard mechanical joint's bell and gland configuration can be employed to connect a spigot end of one pipe length to the bell end of another pipe length in a restrained relationship, with the restraint based on forces superior to rubber-to-pipe friction. In more particular discussion of the embodiments taught, the invention includes forming the gasket to fit within the bell in such a manner that a void, or gutter, exists during rest, into which void the gasket compresses, which in turn influences the rotational motion of the segment. In this manner, the configuration of the gasket influences the timing and extent of rotation throughout the process of securing the gland to the bell.

IPC 1-7
F16L 5/02; **F16L 17/00**; **F16L 17/06**; **F16L 21/04**; **F16L 13/04**

IPC 8 full level
F16L 21/08 (2006.01); **F16L 5/02** (2006.01); **F16L 13/04** (2006.01); **F16L 17/00** (2006.01); **F16L 17/06** (2006.01); **F16L 19/08** (2006.01); **F16L 21/04** (2006.01)

IPC 8 main group level
F16L (2006.01)

CPC (source: EP)
F16L 21/08 (2013.01)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005047745 A2 20050526; **WO 2005047745 A3 20050818**; AU 2003282837 A1 20040606; AU 2003282837 A8 20050606; AU 2003282837 B2 20100304; CA 2536500 A1 20050526; CA 2536500 C 20101102; CA 2709737 A1 20050526; CA 2709737 C 20120925; CN 100504133 C 20090624; CN 1860321 A 20061108; EP 1673568 A2 20060628; EP 1673568 A4 20100707; JP 2007521443 A 20070802; JP 4411489 B2 20100210; MX PA06003795 A 20060614; RU 2006110374 A 20071120; RU 2336454 C2 20081020

DOCDB simple family (application)
US 0332648 W 20031015; AU 2003282837 A 20031015; CA 2536500 A 20031015; CA 2709737 A 20031015; CN 200380110504 A 20031015; EP 03774835 A 20031015; JP 2005510604 A 20031015; MX PA06003795 A 20031015; RU 2006110374 A 20031015