

Title (en)
CONNECTOR USED IN UNDERWATER ENVIRONMENTS

Title (de)
IN UNTERWASSERUMGEBUNGEN VERWENDETER VERBINDER

Title (fr)
CONNECTEUR UTILISÉ DANS DES ENVIRONNEMENTS SOUS-MARINS

Publication
EP 4142067 A1 20230301 (EN)

Application
EP 21192748 A 20210824

Priority
EP 21192748 A 20210824

Abstract (en)
A connector used in underwater environments includes a male connector (10) with a sensing terminal (11) and two power terminals (12), a female connector (20) with a sensing terminal block (21) and two power terminal blocks (22), and an elastic gasket (23) set between the male connector (10) and the female connector (20). When the male connector (10) and the female connector (20) are plugged into each other, and the male and female connectors (10, 20) squeeze the elastic gasket (23) to form a large amount of deformation, the sensing terminal (11) and the sensing terminal block (21) are in contact with each other. When the male and female connectors (10, 20) squeeze the elastic gasket (23) to form a small deformation state, the sensing terminal (11) and the sensing terminal block (21) are separated from each other, and the power terminals (12) and the power terminal blocks (22) are in contact with each other, thereby forming a waterproof protection mechanism.

IPC 8 full level
H01R 13/523 (2006.01); **H01R 13/52** (2006.01); **H01R 13/707** (2006.01); **H01R 13/622** (2006.01); **H01R 13/645** (2006.01)

CPC (source: EP)
H01R 13/5219 (2013.01); **H01R 13/523** (2013.01); **H01R 13/707** (2013.01); **H01R 13/622** (2013.01); **H01R 13/645** (2013.01)

Citation (search report)
• [Y] JP S59160981 A 19840911 - MATSUSHITA ELECTRIC IND CO LTD
• [Y] US 4084875 A 19780418 - YAMAMOTO STEPHEN K
• [Y] US 2017133789 A1 20170511 - HAEGELE WERNER [DE], et al
• [Y] US 6165013 A 20001226 - BROUSSARD BLAINE L [US]
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Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
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