

Title (en)  
TUBBING WORKS HAVING AN INTEGRATED YIELDING ELEMENT

Title (de)  
TÜBBING-AUSBAU MIT INTEGRIERTEM NACHGIEBIGKEITSELEMENT

Title (fr)  
CUVELAGE À ÉLÉMENT ÉLASTIQUE INTÉGRÉ

Publication  
**EP 2510191 A2 20121017 (DE)**

Application  
**EP 10803214 A 20101201**

Priority  
• DE 102009057521 A 20091210  
• DE 2010001389 W 20101201

Abstract (en)  
[origin: WO2011069480A2] The invention relates to tubing works embodied as a tubular inner shell of a tunnel or shaft, which comprises tube sections arranged one behind the other in the longitudinal direction, respectively formed by a tubing ring (2) and aligned in relation to each other with the front annular surfaces (7) thereof in an annular joint (3). Each tubing ring (2) comprises tubbings (4) which are adjacent to each other in the direction of the periphery and form a butt joint (9) between two of the front sides thereof (10) and a deformable flexible element (6a, 6b, 6c, 6d) is arranged in at least one butt joint (9) between two tubbings (4). According to the invention, at least one of the tubbings (4) forms a common prefabricated element with the flexible element (6a, 6b, 6c, 6d), said prefabricated element consisting of a steel reinforcing framework surrounded by concrete to which the flexible element (6a, 6b, 6c, 6d) is connected in a force-fitting manner. The outer traverse contour of the flexible element (6a, 6b, 6c, 6d) is parallel to the butt joint (9) of the outer contour of the front sides (10), and the flexible element (6a, 6b, 6c, 6d) completely covers at least one of two front sides (10) of the tubbings (4).

IPC 8 full level  
**E21D 11/05** (2006.01); **E21D 11/08** (2006.01)

CPC (source: EP US)  
**E21D 11/05** (2013.01 - EP US); **E21D 11/08** (2013.01 - EP US)

Citation (search report)  
See references of WO 2011069480A2

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

DOCDB simple family (publication)  
**DE 102009057521 A1 20110616; DE 102009057521 B4 20110721**; CL 2012001519 A1 20130111; EP 2510191 A2 20121017; EP 2510191 B1 20160302; EP 2510191 B8 20160504; JP 2013513045 A 20130418; US 2012237300 A1 20120920; US 8979434 B2 20150317; WO 2011069480 A2 20110616; WO 2011069480 A3 20120628

DOCDB simple family (application)  
**DE 102009057521 A 20091210**; CL 2012001519 A 20120608; DE 2010001389 W 20101201; EP 10803214 A 20101201; JP 2012542360 A 20101201; US 201013513062 A 20101201