

Title (en)  
CLEANING MECHANISM AND CLEANING APPARATUS PROVIDED WITH SAME

Title (de)  
REINIGUNGSMECHANISMUS UND DAMIT VERSEHENE REINIGUNGSVORRICHTUNG

Title (fr)  
MÉCANISME DE NETTOYAGE ET APPAREIL DE NETTOYAGE DOTÉ DUDIT MÉCANISME

Publication  
**EP 3690379 A4 20201209 (EN)**

Application  
**EP 18866120 A 20181011**

Priority  
• JP 2017198620 A 20171012  
• JP 2018037865 W 20181011

Abstract (en)  
[origin: EP3690379A1] A cleaning mechanism 3 cleans the surfaces of pipes P included in a pipe group Q while traveling in the pipe group Q. The cleaning mechanism 3 includes: a rotating shaft 32 configured to rotate about a predetermined rotation axis A; and scrapers 34 configured to contact the surfaces of the pipes P to thereby remove deposits on the surfaces of pipes P. The scrapers 34 are coupled to the rotating shaft 32 to expand radially outward about the rotation axis A by a centrifugal force of the rotation shaft 32. While passing by the pipes P, the scrapers 34 contact the surfaces of the pipes P while changing radial expansion in conformity with the surface shapes of the pipes P.

IPC 8 full level  
**B08B 9/023** (2006.01); **F22B 37/48** (2006.01); **F23J 3/00** (2006.01); **F28G 3/14** (2006.01)

CPC (source: EP)  
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Citation (search report)  
• [XY] DE 803174 C 19510301 - C L BECKER G M B H  
• [X] US 836629 A 19061120 - CASADAY WILLIAM L [US]  
• [XI] US 784129 A 19050307 - WEINLAND HENRY F [US]  
• [X] DE 313499 C  
• [XI] FR 707546 A 19310709  
• [XI] WO 2014098754 A1 20140626 - ENGLUND ULF [SE], et al  
• [Y] JP 2001336897 A 20011207 - NKK PLANT ENG CORP  
• [Y] JP H01239393 A 19890925 - KANSAI ELECTRIC POWER CO, et al  
• [A] US 2164689 A 19390704 - SHOBE CHESTER L  
• See references of WO 2019074039A1

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

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BA ME

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**EP 3690379 A1 20200805**; **EP 3690379 A4 20201209**; CN 111201416 A 20200526; JP 2019074227 A 20190516; JP 6869162 B2 20210512; WO 2019074039 A1 20190418

DOCDB simple family (application)  
**EP 18866120 A 20181011**; CN 201880066519 A 20181011; JP 2017198620 A 20171012; JP 2018037865 W 20181011