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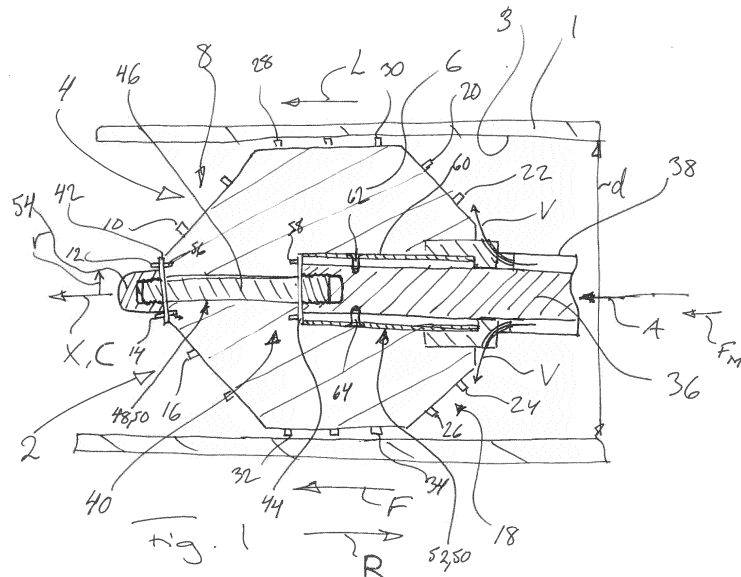
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(54) **DEVICE FOR CLEANING OF PIPES**

(57) The invention relates to a device for cleaning of pipes (1) with a substantially circular cross section, where the device (2) comprises a cleaning head (4), where the cleaning head (4) during rotation of the same about its longitudinal axis (X) is arranged to be fed inside the pipe (1) at least in a forward cleaning direction (F) parallel to the longitudinal direction (L) of the pipe (1) and with the longitudinal axis (X) of the cleaning head (4) substantially

aligned parallel to and concentrically to the centre axis (C) of the pipe (1), where the cleaning head (4) comprises a resilient body (6) with a tapered forward facing end, the cleaning head (4) further comprising multiple rigid cutting devices (10, 12, 14, 16) that are arranged to protrude from the tapered forward facing end of the resilient body (6).





EUROPEAN SEARCH REPORT

Application Number
EP 15 18 9180

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| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
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| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) |
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| X | US 3 087 181 A (CHLEBOWSKI HARRY B) 30 April 1963 (1963-04-30) * column 1, line 10 - column 3, line 33; figures 1,2 * | 1-3,5-8, 15 | |
| Y | US 6 490 748 B1 (O'NEILL BRENDAN EDMOND [AU]) 10 December 2002 (2002-12-10) * column 2, line 62 - column 8, line 63; figures 1-6 * | 4,10-14 | |
| X | US 5 113 544 A (WEBB BRIAN C [US]) 19 May 1992 (1992-05-19) * column 1, lines 5-25; figures 1-7 * * column 1, line 56 - column 2, line 4 * * column 3, line 1 - column 6, line 4; claims 1-7 * | 1,3,6,7, 15 | |
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| A | | 1 | |
| | | | TECHNICAL FIELDS SEARCHED (IPC) |
| | | | B08B E03F |
| The present search report has been drawn up for all claims | | | |
| Place of search | | Date of completion of the search | Examiner |
| The Hague | | 7 July 2016 | Psoch, Christian |
| CATEGORY OF CITED DOCUMENTS | | | |
| X : particularly relevant if taken alone | | T : theory or principle underlying the invention | |
| Y : particularly relevant if combined with another document of the same category | | E : earlier patent document, but published on, or after the filing date | |
| A : technological background | | D : document cited in the application | |
| O : non-written disclosure | | L : document cited for other reasons | |
| P : intermediate document | | & : member of the same patent family, corresponding document | |

EPO FORM 1503 03.02 (P04C01)



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

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Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

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No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

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LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

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see sheet B

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All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

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As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

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Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

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None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

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The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).

**LACK OF UNITY OF INVENTION
SHEET B**Application Number
EP 15 18 9180

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

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1. claims: 1-9, 15

Device for cleaning pipes with a cleaning head comprising multiple serially arranged groups of protruding rigid cutting devices

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2. claims: 10-14

Device for cleaning pipes with a cleaning head comprising a fastening device comprising a forward and a rearward washer arranged to be connected by a threaded rod

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 15 18 9180

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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07-07-2016

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82