

Title (en)  
Nozzle type working tool for cleaning pipes

Title (de)  
Düsenartiges Arbeitswerkzeug zum Reinigen von Rohren

Title (fr)  
Outil de travail à buse pour nettoyer des tuyaux

Publication  
**EP 1163959 A3 20030702 (DE)**

Application  
**EP 01113366 A 20010601**

Priority  
DE 10029920 A 20000617

Abstract (en)  
[origin: EP1163959A2] A high-pressure water-jet cleaner for cleaning pipes with a tapering axial spigot carrying a rotor with nozzles supplied from a central bore, in which the spigot has a threaded end with an adjusting nut and a locknut, by means of which a predetermined gap is set between the rotor and the adjusting nut, the two nuts being bonded together with adhesive. A jet cleaner for cleaning pipes, with a base connected to a high-pressure water source, a central bore and a tapering axial spigot carrying a rotor with outlet nozzles supplied by radial channels from the central bore. In this system, the spigot has a threaded end section with an adjusting nut and a locknut; a predetermined gap is established between the rotor and the adjusting nut and the two nuts are adhesively bonded together.

IPC 1-7  
**B08B 9/049**; **B05B 3/06**; **B08B 9/04**

IPC 8 full level  
**B05B 3/06** (2006.01); **B08B 9/04** (2006.01); **B08B 9/053** (2006.01); **B05B 3/00** (2006.01)

CPC (source: EP)  
**B05B 3/003** (2013.01); **B05B 3/06** (2013.01); **B08B 9/0433** (2013.01); **B08B 9/049** (2013.01); **B08B 9/0495** (2013.01)

Citation (search report)  
• [A] US 4216910 A 19800812 - KIMBROUGH WADE L [US]  
• [DA] DE 3412319 C1 19850627 - WOMA APPBAU WOLFGANG MAASBERG

Cited by  
CN102698902A; AU2013203796B2; CN113865330A; CN105312170A; US9382937B2; WO2012028590A3; WO2017174622A1;  
WO2007088061A1; US10598449B2; US11077453B2

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**EP 1163959 A2 20011219**; **EP 1163959 A3 20030702**; **EP 1163959 B1 20060426**; AT E324195 T1 20060515; DE 10029920 A1 20020103;  
DE 10029920 C2 20020711; DE 50109593 D1 20060601

DOCDB simple family (application)  
**EP 01113366 A 20010601**; AT 01113366 T 20010601; DE 10029920 A 20000617; DE 50109593 T 20010601