

Title (en)  
Cleaning device

Title (de)  
Reinigungsvorrichtung

Title (fr)  
Dispositif de nettoyage

Publication  
**EP 1247911 A3 20030723 (DE)**

Application  
**EP 02004176 A 20020226**

Priority  
• DE 10117449 A 20010406  
• DE 10164007 A 20011228

Abstract (en)  
[origin: EP1247911A2] Cleaning device (1) for intimate regions comprises at least one line (15-17) for cleaning fluid integrated in a toilet seat (2) and ending in at least one opening (20-22) on the inner side of the toilet seat. Preferred Features: The line and opening are integrated in a collar on the under side of the toilet seat. The outer diameter of the collar is smaller than the outer diameter of the toilet seat. The inner diameter (d4) of the collar is larger than the inner diameter (d2) of the toilet seat.

IPC 1-7  
**E03D 9/08; A47K 13/30**

IPC 8 full level  
**E03D 9/08** (2006.01)

CPC (source: EP)  
**E03D 9/08** (2013.01)

Citation (search report)  
• [XY] US 2600619 A 19520617 - CHARLES CONTERNO  
• [X] US 5630234 A 19970520 - CHILDS JACK D [US]  
• [X] US 5279001 A 19940118 - VENTO OSVALDO [US]  
• [X] US 4850060 A 19890725 - CHIENG MING KOU [TW]  
• [X] EP 1083266 A2 20010314 - DORIA LUCIO [IT]  
• [X] CH 651460 A5 19850930 - ANDRE HORIA BUSUIOC  
• [Y] US 4242764 A 19810106 - FUKUDA MAMORU  
• [PX] US 6321396 B1 20011127 - VALLEJO GUALBERTO [US]  
• [A] US 1835497 A 19311208 - BARTON KAHN

Cited by  
CN106164386A; CN107012932A; CN105164348A; EP2993272A4; US9670659B2; US8215903B2; US8226362B2

Designated contracting state (EPC)  
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