

Title (en)  
CLEANING SPONGE ROLLER

Title (de)  
SCHWAMMROLLE ZUM REINIGEN

Title (fr)  
ROULEAU EPONGE DE NETTOYAGE

Publication  
**EP 1188492 A1 20020320 (EN)**

Application  
**EP 00901955 A 20000127**

Priority  
• JP 0000441 W 20000127  
• JP 5127499 A 19990226

Abstract (en)  
A cleaning sponge roller of PVAt is provided, which has improved durability without damaging cleaning performance. The roller is composed of a porous polyvinylacetal material which is elastic in a wet state, comprising a generally cylindrical roller body 3 and a plurality of projections 5 formed integrally on an outer peripheral surface 3a of said roller body for cleaning an object to be cleaned by having tops 5a of the projections 5 rotate in contact with a surface of the object. Each of said projections 5 comprises a tapering projection base portion 11 extending from the outer peripheral surface 3a of the roller body 3 and a projection end portion 13 having substantially the same cross sectional shape from a top end 11b of the projection base portion 11 to the top 5a of the projection. <IMAGE>

IPC 1-7  
**B08B 1/04**

IPC 8 full level  
**B08B 1/04** (2006.01); **H01L 21/304** (2006.01)

CPC (source: EP KR)  
**B08B 1/32** (2024.01 - KR); **B08B 1/34** (2024.01 - EP)

Cited by  
US2017354995A1; US10870132B2; US7640618B2; US7228587B2; US7231685B2; US7234193B2; US7234194B2; US7237296B2; US7237297B2; US7243391B2; US7302729B2; US7302730B2; US7334287B2

Designated contracting state (EPC)  
IE

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**EP 1188492 A1 20020320**; **EP 1188492 A4 20030205**; **EP 1188492 B1 20060426**; AU 2320200 A 20000921; CN 1144626 C 20040407; CN 1341045 A 20020320; JP 2000246187 A 20000912; JP 3403108 B2 20030506; KR 100571640 B1 20060417; KR 20010101706 A 20011114; WO 0051752 A1 20000908

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