

Title (en)  
Paper sizing composition

Title (de)  
Papierleimungszusammensetzung

Title (fr)  
Composition de collage de papier

Publication  
**EP 1659220 A3 20090408 (EN)**

Application  
**EP 05026182 A 20000412**

Priority  
• EP 00923270 A 20000412  
• US 0009762 W 20000412

Abstract (en)  
[origin: WO0233172A1] Paper sizing compositions comprising (a) cellulose-reactive size, (b) dispersant system comprising primary anionic dispersant, and secondary dispersant selected from cationic and/or non-ionic dispersant, and (c) inorganic salt.

IPC 8 full level  
**D21H 17/23** (2006.01); **D21H 21/16** (2006.01); **D21H 17/15** (2006.01); **D21H 17/16** (2006.01); **D21H 17/17** (2006.01); **D21H 17/24** (2006.01); **D21H 17/29** (2006.01); **D21H 17/47** (2006.01); **D21H 17/66** (2006.01)

CPC (source: EP KR)  
**D21H 17/74** (2013.01 - EP); **D21H 21/16** (2013.01 - EP KR); **D21H 17/16** (2013.01 - EP); **D21H 17/17** (2013.01 - EP); **D21H 17/23** (2013.01 - EP); **D21H 17/24** (2013.01 - EP); **D21H 17/29** (2013.01 - EP); **D21H 17/66** (2013.01 - EP)

Citation (search report)  
• [Y] WO 9635841 A1 19961114 - EKA CHEMICALS AB [SE], et al  
• [Y] WO 9401619 A1 19940120 - EKA NOBEL AB [SE], et al  
• [AD] US 5627224 A 19970506 - LYRMALM EBBE [SE], et al  
• [AD] US 3223544 A 19651214 - RALPH SAVINA ANTHONY  
• [AD] US 4861376 A 19890829 - EDWARDS DEREK W [US], et al  
• [A] EP 0628658 A1 19941214 - CALGON CORP [US]  
• [A] US 4069217 A 19780117 - DETROIT WILLIAM JOHN, et al  
• [A] US 5145522 A 19920908 - NAKAGAWA HIROSHI [JP], et al

Designated contracting state (EPC)  
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Designated extension state (EPC)  
AL LT LV MK RO SI

DOCDB simple family (publication)  
**WO 0233172 A1 20020425**; AT E339550 T1 20061015; AU 4342500 A 20020429; BR 0017209 A 20030218; BR 0017209 B1 20110222; CA 2405765 A1 20020425; CA 2405765 C 20081223; CN 1262710 C 20060705; CN 1454274 A 20031105; DE 60030778 D1 20061026; DE 60030778 T2 20070906; EP 1272708 A1 20030108; EP 1272708 B1 20060913; EP 1659220 A2 20060524; EP 1659220 A3 20090408; ES 2267524 T3 20070316; JP 2004511680 A 20040415; JP 4748922 B2 20110817; KR 100648124 B1 20061124; KR 20020087140 A 20021121; MX PA02009957 A 20060118; PL 208342 B1 20110429; PL 358583 A1 20040809; PT 1272708 E 20061229

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