

Title (en)
LIQUID CLEANING COMPOSITION

Title (de)
FLÜSSIGREINIGUNGSZUSAMMENSETZUNG

Title (fr)
COMPOSITION DE NETTOYAGE LIQUIDE

Publication
EP 2981601 B1 20160817 (EN)

Application
EP 14710300 A 20140317

Priority
• EP 13162083 A 20130403
• EP 2014055238 W 20140317
• EP 14710300 A 20140317

Abstract (en)
[origin: WO2014161714A1] The present invention relates to a liquid cleaner composition, in particular a composition comprising a copolymer which is effective as suspending active. The liquid cleaner composition comprises 1 to 10 %-wt of one or more surfactants, 0.4 to 1 %-wt of one or more rheology modifier copolymers, and water, whereby the composition has a pH of between 8 and 13. The one or more rheology modifier copolymer are selected from the group of copolymers of the formula wherein A is a macromonomer of homo-or co-polymer of C1-C10 alkyl acrylates, C1-C10 alkyl methacrylates, methacrylic acid, acrylic acid or combinations thereof, Bis acrylic or methacrylic acid or a salt thereof, C, when present, is a polyacidic vinyl monomer, and D, when present, is a cross-linking monomer. The invention also relates to a method for preparing the liquid cleaner composition and use of the liquid cleaner composition.

IPC 8 full level
C11D 3/37 (2006.01)

CPC (source: EP)
C11D 3/3765 (2013.01)

Citation (opposition)
Opponent : The Procter and Gamble Company
• US 4836948 A 19890606 - CORRING ROBERT [US]
• US 5981457 A 19991109 - AHMED FAHIM U [US]
• CA 2320536 A1 20010323 - HENKEL KGAA [DE]
• US 5516459 A 19960514 - VAN EENAM DONALD N [US]
• US 6010995 A 20000104 - VAN EENAM DONALD N [US]
• EP 0741185 B1 19990303 - DEGUSSA [DE]
• US 5004557 A 19910402 - NAGARAJAN MADUKKARAI K [US], et al
• EP 0699226 B1 19970226 - UNILEVER PLC [GB], et al
• US 7270131 B2 20070918 - HOCKING EDWARD [US], et al
• IZUNOBI ET AL.: "Polymer Molecular Weight Analysis by 1 H NMR Spectroscopy", J. CHEM. EDUC., vol. 88, no. 8, 31 May 2011 (2011-05-31), pages 1098 - 1104, XP055363144
• SHIT ET AL.: "Application of NMR spectroscopy in molecular weight determination of polymers", EUR. POLYM. J., vol. 22, no. 12, 1986, pages 1001 - 1008, XP022739175

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2014161714 A1 20141009; EA 028607 B1 20171229; EA 201591909 A1 20160229; EP 2981601 A1 20160210; EP 2981601 B1 20160817; PL 2981601 T3 20170228; ZA 201507331 B 20171129

DOCDB simple family (application)
EP 2014055238 W 20140317; EA 201591909 A 20140317; EP 14710300 A 20140317; PL 14710300 T 20140317; ZA 201507331 A 20151002