

Title (en)
DETERGENT COMPOSITION COMPRISING SOURCE OF HYDROGEN PEROXIDE AND PROTEASE ENZYME

Title (de)
WASCH- UND REINIGUNGSMITTEL ENTHALTEND WASSERSTOFFPEROXIDQUELLE UND PROTEASE

Title (fr)
COMPOSITION DETERGENTE COMPORTANT UNE SOURCE DE PEROXYDE D'HYDROGENE ET UNE PROTEASE

Publication
EP 0819164 B2 20130313 (EN)

Application
EP 96906561 A 19960220

Priority
• GB 9504978 A 19950311
• GB 9515580 A 19950728
• US 9602337 W 19960220

Abstract (en)
[origin: WO9628534A1] There is provided a non-phosphate builder-containing detergent composition comprising a surfactant, and a) at least 0.5 % by weight of a source of hydrogen peroxide; b) from 0.01 % to 10 % by weight of an organic peroxyacid bleach precursor; c) from 0.001 % to 5 % by weight of a proteolytic enzyme; d) an alkalinity source having the capacity to deliver alkalinity to a wash solution as measured by the alkalinity release test described herein, such that the % weight NaOH equivalent of the composition is greater than 10.6 % by weight of the composition, and wherein the detergent composition has a Hydrogen peroxide Precursor Proteolytic enzyme (HPP) Index of at least 0.35 as defined by the formula $HPP = (\% \text{ weight of precursor} \times \% \text{ weight of proteolytic enzyme}) / (\%AvO_2) < 2$, wherein the % weight of proteolytic enzyme in the formulation is based on an enzyme activity of 13 knpu/g of the enzyme particle, and wherein the %AvO₂ is the total amount of available oxygen present in the composition.

IPC 8 full level
C11D 3/08 (2006.01); **C11D 3/395** (2006.01); **C11D 3/10** (2006.01); **C11D 3/36** (2006.01); **C11D 3/386** (2006.01); **C11D 3/39** (2006.01)

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Citation (opposition)
Opponent :
• EP 0842246 A1 19980520 - PROCTER & GAMBLE [US]
• EP 0710713 A2 19960508 - PROCTER & GAMBLE [US]
• EP 0710714 A2 19960508 - PROCTER & GAMBLE [US]
• EP 0755434 A1 19970129 - PROCTER & GAMBLE [US]
• EP 0755432 A1 19970129 - PROCTER & GAMBLE [US]
• WO 9502671 A1 19950126 - PROCTER & GAMBLE [US], et al
• WO 9424240 A1 19941027 - PROCTER & GAMBLE [US]
• EP 0634479 A1 19950118 - PROCTER & GAMBLE [US]

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WO 9628534 A1 19960919; AR 001203 A1 19970924; AT E300603 T1 20050815; AU 4990196 A 19961002; BR 9607676 A 19980707; CA 2214397 A1 19960919; CO 4700545 A1 19981229; CZ 283897 A3 19980218; DE 69634977 D1 20050901; DE 69634977 T2 20060524; DE 69634977 T3 20130725; EP 0819164 A1 19980121; EP 0819164 A4 20010808; EP 0819164 B1 20050727; EP 0819164 B2 20130313; ES 2247603 T3 20060301; ES 2247603 T5 20130708; HU P9801417 A2 19981228; HU P9801417 A3 19990301; MX 9706915 A 19971129; PE 60696 A1 19970110; TR 199700936 T1 19980221

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US 9602337 W 19960220; AR 33570696 A 19960311; AT 96906561 T 19960220; AU 4990196 A 19960220; BR 9607676 A 19960220; CA 2214397 A 19960220; CO 96010545 A 19960305; CZ 283897 A 19960220; DE 69634977 T 19960220; EP 96906561 A 19960220; ES 96906561 T 19960220; HU P9801417 A 19960220; MX 9706915 A 19960220; PE 00016196 A 19960308; TR 9700936 T 19960220