

Title (en)

Proteolytic perhydrolysis system and method of use for bleaching.

Title (de)

Proteolytisches Perhydrolysesystem und Verfahren zur Anwendung für das Bleichen.

Title (fr)

Système de perhydrolyse protéolytique et procédé d'utilisation pour le blanchiment.

Publication

EP 0359087 A2 19900321 (EN)

Application

EP 89116326 A 19890905

Priority

US 24333188 A 19880912

Abstract (en)

A perhydrolysis system or activated oxidant system for in situ generation of peracid in aqueous solutions is disclosed, including: (a) a protease enzyme; (b) an ester substrate having the structure $R_{min}(Z) @ (CH_2)_r - @ - O - R$, wherein $R = C_{1-11}$ -alkyl, $R_{min} = C_{1-10}$ -alkyl or H, $Z = O$ or a polyalkoxy residue of the formula $(CH_2CH_2O)_m$ or $<CHEM>$ wherein $m = 0-10$, $r = 0$ or 1 ; R and R_{min} optionally having OH-substituents pendant on or terminating the hydrocarbyl chains, and (c) a source of peroxygen capable of reacting with the protease (a) and the ester substrate (b) to result in proteolytic production of peracid.

IPC 1-7

C11D 3/386; **C11D 3/39**

IPC 8 full level

C11D 7/42 (2006.01); **C11D 3/386** (2006.01); **C11D 3/39** (2006.01); **C11D 7/54** (2006.01)

CPC (source: EP)

C11D 3/386 (2013.01); **C11D 3/391** (2013.01)

Cited by

US5240743A; US5364554A; US5576470A; US5431843A; US5486212A; EP0447553A4; US5932532A; US5338474A; EP2292743A3; EP2295554A3; CN103333870A; EP2664670A1; US6432661B1; WO2005056782A3; US8772007B2; US9282746B2

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0359087 A2 19900321; **EP 0359087 A3 19911023**; AU 2218492 A 19930107; AU 3672989 A 19900315; JP 2729676 B2 19980318; JP H02113097 A 19900425

DOCDB simple family (application)

EP 89116326 A 19890905; AU 2218492 A 19920904; AU 3672989 A 19890621; JP 22945389 A 19890906