

Title (en)
POLYPHOSPHONATE DERIVATIVES FOR TOOTHPASTE COMPOSITIONS

Title (de)
POLYPHOSPHONATDERIVATE IN ZUSAMMENSTELLUNGEN ZUR ZAHNPFLEGE

Title (fr)
DERIVES POLY-PHOSPHONATES POUR COMPOSITIONS DENTIFRICES

Publication
EP 1494682 A2 20050112 (FR)

Application
EP 03740602 A 20030414

Priority
• FR 0301178 W 20030414
• FR 0204596 A 20020412

Abstract (en)
[origin: FR2838339A1] Polyphosphonate derivatives (I) and their salts are new. Polyphosphonate derivatives of formula (I) and their salts are new. R1, R2, R3, R5, R6, R7, R8 = H or 1-6C alkyl or aryl; X = C or N; A', B', C' = a bond, 1-6C alkyl or aryl, carbonyl or a hydrophilic group; R4 = H, OH, 1-6C alkyl or aryl, 1-6C carboxylic acid, a double bond (where X is N), a phosphonate (i), a quaternary ammonium (ii), a hydrophilic group, or a polyphosphonate (iii) (attachment position not defined); R9, R10 = H, 1-6C alkyl, or aryl; R11, R12, R13 = H, 1-6C alkyl, or aryl; B'', C'' = a bond, 1-6C alkyl, carbonyl or a hydrophilic group; R'1, R'2, R'3, R'5, R'6, R'7, R'8 = H, 1-6C alkyl, or aryl; A'' = a bond, 1-6C alkyl or aryl, carbonyl, or a hydrophilic group; and R'4 = an undefined group.

IPC 1-7
A61K 31/66; A61P 31/04; A61K 7/22; A61K 31/663

IPC 8 full level
A61K 8/00 (2006.01); **A61K 8/55** (2006.01); **A61K 31/663** (2006.01); **A61P 1/02** (2006.01); **A61P 31/04** (2006.01); **A61Q 11/00** (2006.01)

CPC (source: EP US)
A61K 8/55 (2013.01 - EP US); **A61P 1/02** (2017.12 - EP); **A61P 31/04** (2017.12 - EP); **A61Q 11/00** (2013.01 - EP US)

Citation (search report)
See references of WO 03086412A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
FR 2838339 A1 20031017; FR 2838339 B1 20050624; AU 2003262154 A1 20031027; AU 2003262154 A8 20031027; CA 2482230 A1 20031023; EP 1494682 A2 20050112; JP 2005529107 A 20050929; US 2005153938 A1 20050714; WO 03086412 A2 20031023; WO 03086412 A3 20040401; WO 03086412 B1 20040527

DOCDB simple family (application)
FR 0204596 A 20020412; AU 2003262154 A 20030414; CA 2482230 A 20030414; EP 03740602 A 20030414; FR 0301178 W 20030414; JP 2003583431 A 20030414; US 51104804 A 20041012