

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)

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