

Title (en)  
PROTEASE INHIBITORS

Title (de)  
PROTEASEHEMMER

Title (fr)  
INHIBITEURS DE PROTEASES

Publication  
**EP 1307204 A1 20030507 (EN)**

Application  
**EP 01946344 A 20010614**

Priority  
• US 0119062 W 20010614  
• US 59384500 A 20000614

Abstract (en)  
[origin: WO0195911A1] The present invention provides 4-amino-azepan-3-one protease inhibitors and pharmaceutically acceptable salts, hydrates and solvates thereof which inhibit proteases, including cathepsin K, pharmaceutical compositions of such compounds, novel intermediates of such compounds, and methods for treating diseases of excessive bone loss or cartilage or matrix degradation, including osteoporosis; gingival disease including gingivitis and periodontitis; arthritis, more specifically, osteoarthritis and rheumatoid arthritis; Paget's disease; hypercalcemia of malignancy; and metabolic bone disease, comprising inhibiting said bone loss or excessive cartilage or matrix degradation by administering to a patient in need thereof a compound of the present invention.

IPC 1-7  
**A61K 31/55**; C07D 405/12; C07D 409/12; C07D 401/12; C07D 405/14; C07D 401/10; C07D 401/14; C07D 403/12; C07D 409/14; C07D 471/04; C07D 417/14; A61P 29/00; A61P 31/00; A61P 33/00; A61P 35/04; A61P 19/00

IPC 8 full level  
**A61K 31/55** (2006.01); **A61P 1/02** (2006.01); **A61P 19/02** (2006.01); **A61P 19/08** (2006.01); **A61P 19/10** (2006.01); **A61P 33/00** (2006.01); **A61P 33/02** (2006.01); **A61P 33/08** (2006.01); **A61P 33/12** (2006.01); **A61P 43/00** (2006.01); **C07D 223/12** (2006.01); **C07D 401/10** (2006.01); **C07D 401/12** (2006.01); **C07D 401/14** (2006.01); **C07D 403/12** (2006.01); **C07D 405/12** (2006.01); **C07D 405/14** (2006.01); **C07D 409/12** (2006.01); **C07D 413/14** (2006.01); **C07D 417/14** (2006.01); **C07D 471/04** (2006.01); **C07D 491/048** (2006.01); **C07D 495/04** (2006.01)

CPC (source: EP KR)  
**A61P 1/02** (2018.01 - EP); **A61P 19/00** (2018.01 - EP); **A61P 19/02** (2018.01 - EP); **A61P 19/04** (2018.01 - EP); **A61P 19/08** (2018.01 - EP); **A61P 19/10** (2018.01 - EP); **A61P 29/00** (2018.01 - EP); **A61P 31/00** (2018.01 - EP); **A61P 33/00** (2018.01 - EP); **A61P 33/02** (2018.01 - EP); **A61P 33/06** (2018.01 - EP); **A61P 33/08** (2018.01 - EP); **A61P 33/12** (2018.01 - EP); **A61P 35/04** (2018.01 - EP); **A61P 43/00** (2018.01 - EP); **C07D 223/12** (2013.01 - EP); **C07D 401/12** (2013.01 - EP); **C07D 405/14** (2013.01 - EP); **C07D 409/14** (2013.01 - KR); **Y02A 50/30** (2018.01 - EP)

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**WO 0195911 A1 20011220**; AP 2002002671 A0 20021231; AR 032622 A1 20031119; AU 6840701 A 20011224; BG 107327 A 20030731; BR 0111693 A 20040406; CA 2412353 A1 20011220; CN 1444481 A 20030924; CZ 20024086 A3 20030514; EA 200300018 A1 20030626; EC SP024388 A 20030206; EP 1307204 A1 20030507; EP 1307204 A4 20040602; HU P0301231 A2 20030828; IL 153421 A0 20030706; JP 2004503502 A 20040205; KR 20030008220 A 20030124; MA 25758 A1 20030401; MX PA02012442 A 20030425; NO 20025786 D0 20021202; NO 20025786 L 20030212; NZ 522965 A 20040625; OA 12288 A 20031212; PE 20011374 A1 20020407; PL 360508 A1 20040906; SK 17592002 A3 20030502; ZA 200209808 B 20040709

DOCDB simple family (application)  
**US 0119062 W 20010614**; AP 2002002671 A 20010614; AR P010102840 A 20010614; AU 6840701 A 20010614; BG 10732702 A 20021128; BR 0111693 A 20010614; CA 2412353 A 20010614; CN 01813500 A 20010614; CZ 20024086 A 20010614; EA 200300018 A 20010614; EC SP024388 A 20021212; EP 01946344 A 20010614; HU P0301231 A 20010614; IL 15342101 A 20010614; JP 2002510089 A 20010614; KR 20027017045 A 20021213; MA 26952 A 20021213; MX PA02012442 A 20010614; NO 20025786 A 20021202; NZ 52296501 A 20010614; OA 1200200377 A 20010614; PE 2001000566 A 20010614; PL 36050801 A 20010614; SK 17592002 A 20010614; ZA 200209808 A 20021203