

Title (en)
PROCESSES FOR PREPARING CALCIUM SALT FORMS OF STATINS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON CALCIUMSALZFORMEN VON STATINEN

Title (fr)
PROCEDES PERMETTANT DE PREPARER DES FORMES SALINES CALCIQUES DE STATINES

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Application
EP 02759374 A 20020816

Priority
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Abstract (en)
[origin: WO03016317A1] Processes for preparing a calcium salt of a statin from an ester derivative or protected ester derivative of the statin by using calcium hydroxide are provided. The ester or protected ester derivative is contacted with calcium hydroxide to obtain the calcium salt. Preferred statins are rosuvastatin, pitavastatin and atorvastatin, simvastatin and lovastatin. In processes beginning with a protected statin ester derivative, the protecting group is hydrolyzed during salt formation by contact with calcium hydroxide, or is contacted with an acid catalyst followed by contact with calcium hydroxide.

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Citation (search report)
• [X] US 4137322 A 19790130 - ENDO AKIRA, et al
• [PX] WO 0243667 A2 20020606 - TEVA PHARMA [IL], et al
• [PX] WO 0243732 A1 20020606 - TEVA PHARMA [IL], et al
• [PX] WO 02051804 A1 20020704 - CIBA SC HOLDING AG [CH], et al
• [E] WO 03018547 A2 20030306 - MOREPEN LAB LTD [IN], et al

Citation (examination)
• WO 0049014 A1 20000824 - ASTRAZENECA UK LTD [GB], et al
• WATANABE M ET AL: "Synthesis and biological activity of methanesulfonamide pyrimidine- and N-methanesulfonyl pyrrole-substituted 3,5-dihydroxy-6-heptenoates, a novel series of HMG-CoA reductase inhibitors", BIOORGANIC AND MEDICINAL CHEMISTRY 199702 GB LNKD-DOI:10.1016/S0968-0896(96)00248-9, vol. 5, no. 2, February 1997 (1997-02-01), pages 437 - 444, ISSN: 0968-0896
• See also references of WO 03016317A1

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