

Title (en)
INHALENT FORMULATION CONTAINING SULFOALKYL ETHER GAMMA-CYCLODEXTRYN AND CORTICOSTEROID

Title (de)
INHALATIONSFORMULIERUNG MIT SULFOALKYLETHER-GAMMA-CYCLODEXTRIN UND CORTICOSTEROID

Title (fr)
FORMULATION INHALABLE CONTENANT DE L'ETHER SULFOALKYLE G-CYCLODEXTRINE ET UN CORTICOSTEROIDE

Publication
EP 1729724 A4 20080723 (EN)

Application
EP 05704920 A 20041231

Priority
• US 2005000085 W 20041231
• US 53362803 P 20031231

Abstract (en)
[origin: WO2005065649A1] An inhalable formulation containing SEA-gamma-CD and corticosteroid is provided. The formulation is adapted for administration to a subject by nebulization with any known nebulizer. The formulation can be included in a kit. The formulation is administered as an aqueous solution, however, it can be stored as a dry powder, ready-to-use solution, or concentrated composition. The formulation is employed in an improved nebulization system for administering corticosteroid by inhalation. SAE-gamma-CD present in the formulation significantly enhances the chemical stability of budesonide. A method of administering the formulation by inhalation is provided. The formulation can also be administered by conventional nasal delivery apparatus. The formulation can include one or more additional therapeutic agents for use in combination with the corticosteroid. SAE-gamma-CD is especially useful for solubilizing esterified corticosteroids.

IPC 8 full level
A61K 9/08 (2006.01); **A61K 9/00** (2006.01); **A61K 9/12** (2006.01); **A61K 9/14** (2006.01); **A61K 31/16** (2006.01); **A61K 31/57** (2006.01); **A61K 31/715** (2006.01); **A61K 47/40** (2006.01); **A61K 47/48** (2006.01); **C08B 37/16** (2006.01)

CPC (source: EP IL KR)
A61K 9/00 (2013.01 - KR); **A61K 9/0075** (2013.01 - EP IL); **A61K 9/0078** (2013.01 - EP IL); **A61K 9/08** (2013.01 - EP IL); **A61K 31/137** (2013.01 - EP IL); **A61K 31/167** (2013.01 - EP IL); **A61K 31/46** (2013.01 - EP IL); **A61K 31/56** (2013.01 - EP IL); **A61K 31/573** (2013.01 - EP IL KR); **A61K 31/58** (2013.01 - EP IL); **A61K 47/40** (2013.01 - EP IL); **A61K 47/6951** (2017.07 - EP IL); **A61P 11/00** (2017.12 - EP IL); **A61P 11/06** (2017.12 - EP IL); **A61P 29/00** (2017.12 - EP IL); **A61P 43/00** (2017.12 - EP); **B82Y 5/00** (2013.01 - EP IL)

Citation (search report)
• [XD] US 5914122 A 19990622 - OTTERBECK NORBERT [DE], et al
• [A] WO 9818827 A1 19980507 - FARMARC NEDERLAND BV [NL], et al
• [A] WO 9711090 A1 19970327 - WEISZ PAUL B [US]
• [A] US 6046177 A 20000404 - STELLA VALENTINO J [US], et al
• [A] K. FLOOD ET AL.: "Characterization of inclusion complexes of betamethasone related steroids with cyclodextrins using high-performance liquid chromatography.", JOURNAL OF CHROMATOGRAPHY, vol. 903, 2000, pages 49 - 65, XP004221248
• See references of WO 2005065649A1

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

DOCDB simple family (publication)
WO 2005065649 A1 20050721; AU 2004311478 A1 20050721; AU 2004312095 A1 20050721; AU 2004312096 A1 20050721; BR PI0418232 A 20070427; BR PI0418276 A 20070502; BR PI0418276 B1 20170214; BR PI0418276 B8 20210525; BR PI0418386 A 20070522; CA 2551749 A1 20050721; CA 2551749 C 20140211; CA 2551826 A1 20050721; CA 2552641 A1 20050721; CN 1921830 A 20070228; CN 1921834 A 20070228; CN 1976679 A 20070606; CN 1976679 B 20110831; DK 1732512 T3 20170710; EP 1718276 A2 20061108; EP 1718276 A4 20080723; EP 1729724 A1 20061213; EP 1729724 A4 20080723; EP 1732512 A2 20061220; EP 1732512 A4 20080723; EP 1732512 B1 20170322; EP 3238708 A1 20171101; HU E032527 T2 20170928; IL 176575 A0 20061031; IL 176576 A0 20061031; IL 176577 A0 20061031; IL 225946 A0 20130627; IL 225946 A 20170430; IL 251496 A0 20170529; IL 251496 B 20210429; JP 2007517067 A 20070628; JP 2007517068 A 20070628; JP 2007517069 A 20070628; JP 2012224648 A 20121115; JP 2015129173 A 20150716; JP 2016172774 A 20160929; JP 5782413 B2 20150924; JP 6186478 B2 20170823; KR 20070005586 A 20070110; KR 20070007075 A 20070112; KR 20070007076 A 20070112; MX 348041 B 20170525; MX PA06007581 A 20070309; NZ 548225 A 20121221; PT 1732512 T 20170724; RU 2006127432 A 20080210; RU 2006127443 A 20080210; RU 2006127467 A 20080210; RU 2388462 C2 20100510; RU 2390330 C2 20100527; WO 2005065435 A2 20050721; WO 2005065435 A3 20050901; WO 2005065651 A1 20050721

DOCDB simple family (application)
US 2005000085 W 20041231; AU 2004311478 A 20041231; AU 2004312095 A 20041231; AU 2004312096 A 20041231; BR PI0418232 A 20041231; BR PI0418276 A 20041231; BR PI0418386 A 20041231; CA 2551749 A 20041231; CA 2551826 A 20041231; CA 2552641 A 20041231; CN 200480042227 A 20041231; CN 200480042228 A 20041231; CN 200480042229 A 20041231; DK 05704917 T 20041231; EP 05704917 A 20041231; EP 05704919 A 20050103; EP 05704920 A 20041231; EP 17161913 A 20041231; HU E05704917 A 20041231; IL 17657506 A 20060627; IL 17657606 A 20060627; IL 17657706 A 20060627; IL 22594613 A 20130425; IL 25149613 A 20130425; IL 25149617 A 20170402; JP 2006547613 A 20041231; JP 2006547614 A 20041231; JP 2006547615 A 20041231; JP 2012184694 A 20120824; JP 2015041915 A 20150304; JP 2016133094 A 20160705; KR 20067015494 A 20060731; KR 20067015501 A 20060731; KR 20067015502 A 20060731; MX 2015006104 A 20041231; MX PA06007581 A 20041231; NZ 54822504 A 20041231; PT 05704917 T 20050103; RU 2006127432 A 20041231; RU 2006127443 A 20041231; RU 2006127467 A 20041231; US 2005000082 W 20041231; US 2005000084 W 20050103