

Title (en)  
VARIANTS OF THE GROUP-5 ALLERGENS OF THE POACEAE WITH REDUCED ALLERGENICITY BY MUTAGENESIS OF PROLINE RESIDUES

Title (de)  
VARIANTEN DER GRUPPE 5-ALLERGENE DER SÜßGRÄSER MIT REDUZIERTER ALLERGENITÄT DURCH MUTAGENESE VON PROLINRESTEN

Title (fr)  
VARIANTS DES ALLERGÈNES DU GROUPE 5 DES POACÉES PRÉSENTANT UNE ALLERGÉNICITÉ RÉDUITE, PAR MUTAGÈNESE DE RÉSIDUS DE PROLINE

Publication  
**EP 2523685 A1 20121121 (DE)**

Application  
**EP 10795625 A 20101217**

Priority  
• EP 10000296 A 20100114  
• EP 2010007746 W 20101217  
• EP 10795625 A 20101217

Abstract (en)  
[origin: WO2011085783A1] The present invention relates to the preparation and the use of recombinant variants of the group-5 allergens of the poaceae which are characterized by the fact that their IgE reactivity is reduced in comparison with the known wild-type allergens while simultaneously the reactivity with T-lymphocytes is largely retained.

IPC 8 full level  
**A61K 39/36** (2006.01); **C07K 14/415** (2006.01)

CPC (source: CN EP RU US)  
**A61K 39/36** (2013.01 - EP RU US); **A61P 37/02** (2018.01 - EP); **A61P 37/08** (2018.01 - EP RU); **C07K 14/415** (2013.01 - CN EP RU US); **A61K 38/00** (2013.01 - CN EP US); **A61K 39/00** (2013.01 - CN EP RU US); **A61K 48/00** (2013.01 - CN)

Citation (examination)  
• WO 2006138435 A2 20061228 - SINAI SCHOOL MEDICINE [US], et al  
• US 2007044171 A1 20070222 - KOVALIC DAVID K [US], et al & DATABASE GENESEQ [online] 3 February 2011 (2011-02-03), "Wheat recombinant protein SEQ ID NO 134108.", XP007922765, retrieved from EBI accession no. GSP:AOH91303 Database accession no. AOH91303  
• WO 2010018378 A2 20100218 - CIRCASSIA LTD [GB], et al  
• See also references of WO 2011085783A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2011085783 A1 20110721**; AU 2010342533 A1 20120830; AU 2010342533 B2 20170223; BR 112012016768 A2 20180508; CA 2786936 A1 20110721; CN 102791289 A 20121121; CN 102791289 B 20160518; CN 105061571 A 20151118; EP 2523685 A1 20121121; EP 3170510 A1 20170524; JP 2013516962 A 20130516; JP 5871819 B2 20160301; RU 2012134508 A 20140220; RU 2658767 C1 20180622; US 2015140024 A1 20150521; US 2018002387 A1 20180104; US 9975932 B2 20180522

DOCDB simple family (application)  
**EP 2010007746 W 20101217**; AU 2010342533 A 20101217; BR 112012016768 A 20101217; CA 2786936 A 20101217; CN 201080061431 A 20101217; CN 201510487160 A 20101217; EP 10795625 A 20101217; EP 16002678 A 20101217; JP 2012548350 A 20101217; RU 2012134508 A 20101217; RU 2015135220 A 20101217; US 201013522093 A 20101217; US 201715700430 A 20170911