

Title (en)  
SILK POLYPEPTIDES

Title (de)  
SEIDENPOLYPEPTIDE

Title (fr)  
POLYPEPTIDES DE SOIE

Publication  
**EP 2850191 A4 20160323 (EN)**

Application  
**EP 13770285 A 20130326**

Priority  
• US 201261615745 P 20120326  
• AU 2013000308 W 20130326

Abstract (en)  
[origin: WO2013142901A1] The present disclosure provides polypeptides which encode a silk polypeptide, wherein at least a portion of the polypeptide has a coiled coil structure comprising at least 10 copies of the heptad sequence abcdefg, and wherein at least 25% of the amino acids at position a are alanine residues and at least 20% of the amino acids at position d are aromatic residues. The present disclosure also provides nucleic acids encoding such polypeptides, and recombinant cells and/or organisms which synthesize the polypeptides. The polypeptides can be used for a variety of purposes such as in the production of personal care products, plastics, textiles, and biomedical products.

IPC 8 full level  
**C12N 15/12** (2006.01); **A61K 38/17** (2006.01); **C07K 14/435** (2006.01)

CPC (source: EP)  
**C07K 14/43563** (2013.01); **A61K 38/00** (2013.01)

Citation (search report)  
• [E] WO 2013120143 A1 20130822 - COMMW SCIENT IND RES ORG [AU]  
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• [T] TARA D. SUTHERLAND ET AL: "Convergently-evolved structural anomalies in the coiled coil domains of insect silk proteins", JOURNAL OF STRUCTURAL BIOLOGY, vol. 186, no. 3, 13 January 2014 (2014-01-13), United States, pages 402 - 411, XP055242550, ISSN: 1047-8477, DOI: 10.1016/j.jsb.2014.01.002  
• See references of WO 2013142901A1

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 2013142901 A1 20131003**; AU 2013239320 A1 20141023; AU 2013239320 B2 20181101; CA 2904749 A1 20131003;  
EP 2850191 A1 20150325; EP 2850191 A4 20160323

DOCDB simple family (application)  
**AU 2013000308 W 20130326**; AU 2013239320 A 20130326; CA 2904749 A 20130326; EP 13770285 A 20130326