

Title (en)

A COMPOSITION COMPRISING ANTIGENS AND A MUCOSAL ADJUVANT AND A METHOD FOR USING

Title (de)

ZUSAMMENSETZUNG MIT ANTIGENEN UND EINEM SCHLEIMHAUTADJUVANS UND VERFAHREN ZUR VERWENDUNG

Title (fr)

COMPOSITION COMPRENANT DES ANTIGÈNES ET UN ADJUVANT POUR LES MUQUEUSES ET MÉTHODE D'UTILISATION

Publication

**EP 3454893 A4 20200101 (EN)**

Application

**EP 16901833 A 20160511**

Priority

US 2016031902 W 20160511

Abstract (en)

[origin: WO2017196318A1] The majority of the mortality observed in young pigs occurs between three and five weeks post-weaning for *S. suis* infections and between four and six weeks post- weaning for *H. parasuis* and *Actinobacillus suis* infections. Control of clinical disease associated with *S. suis*, *A. suis* and with *H. parasuis* has been attempted by means of antibiotic treatment, by controlled exposure with live organisms, and by vaccination, using either inactivated commercial or autogenous bacterins administered parenterally. Disclosed herein is an immunogenic composition comprising antigens and a mucosal adjuvant. The composition may be administered to subjects, such as animals, particularly piglets from pre-weaning through the nursery phase, such as from birth or from three to five days of age, to protect from these diseases.

IPC 8 full level

**A61K 39/02** (2006.01); **A61K 39/09** (2006.01)

CPC (source: EP)

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**A61K 2039/552** (2013.01); **A61K 2039/55566** (2013.01)

Citation (search report)

- [X] WO 2014004361 A1 20140103 - MERIAL LTD [US]
- [I] US 2011123570 A1 20110526 - KROLL JEREMY [US], et al
- [X] CN 104511015 A 20150415 - PU LIKE BIO ENG CO LTD
- [A] EP 1001025 A2 20000517 - PFIZER PROD INC [US]
- [T] CN 110075289 A 20190802 - INST OF ANIMAL HUSBANDRY AND VETERINARY MEDICINE HENAN ACADEMY OF AGRICULTURAL SCIENCES
- [I] WANG SHUJING ET AL: "Intranasal and oral vaccination with protein-based antigens: advantages, challenges and formulation strategies", PROTEIN & CELL, SPRINGER ASIA, BEIJING, CN, vol. 6, no. 7, 6 May 2015 (2015-05-06), pages 480 - 503, XP035507308, ISSN: 1674-800X, [retrieved on 20150506], DOI: 10.1007/S13238-015-0164-2
- [I] SHARAD MANGAL ET AL: "Evaluation of mucoadhesive carrier adjuvant: Toward an oral anthrax vaccine", ARTIFICIAL CELLS, NANOMEDICINE AND BIOTECHNOLOGY, vol. 42, no. 1, 1 February 2014 (2014-02-01), US, pages 47 - 57, XP055645252, ISSN: 2169-1401, DOI: 10.3109/21691401.2013.769447
- [A] MAYANK CHATURVEDI ET AL: "A review on mucoadhesive polymer used in nasal drug delivery system", JOURNAL OF ADVANCED PHARMACEUTICAL TECHNOLOGY & RESEARCH, vol. 2, no. 4, 1 October 2011 (2011-10-01), pages 215 - 222, XP055232682, DOI: 10.4103/2231-4040.90876

Citation (examination)

- WO 0249666 A2 20020627 - WYETH CORP [US]
- US 4944942 A 19900731 - BROWN KAREN K [US], et al
- See also references of WO 2017196318A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

**WO 2017196318 A1 20171116**; CA 3022006 A1 20171116; EP 3454893 A1 20190320; EP 3454893 A4 20200101

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