



(12) **CORRECTED EUROPEAN PATENT SPECIFICATION**

(15) Correction information:
Corrected version no 1 (W1 B1)
Corrections, see
Bibliography INID code(s) 73

(51) Int Cl.:
A01N 63/00 ^(2020.01) **C12N 15/00** ^(2006.01)
C12N 15/86 ^(2006.01)

(48) Corrigendum issued on:
26.08.2020 Bulletin 2020/35

(86) International application number:
PCT/US2015/029905

(45) Date of publication and mention
of the grant of the patent:
08.07.2020 Bulletin 2020/28

(87) International publication number:
WO 2015/172033 (12.11.2015 Gazette 2015/45)

(21) Application number: **15789628.3**

(22) Date of filing: **08.05.2015**

(54) **VACCINES AGAINST GENITAL HERPES SIMPLEX INFECTIONS**

IMPFSTOFFE GEGEN INFEKTIONEN MIT GENITAL-HERPES-SIMPLEX

VACCINS CONTRE LES INFECTIONS DE L'HERPÈS SIMPLEX GÉNITAL

(84) Designated Contracting States:
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

(56) References cited:
WO-A1-92/13943 WO-A1-99/36087
WO-A2-2008/141151 WO-A2-2013/177172
US-B1- 7 374 768

(30) Priority: **09.05.2014 US 201461990975 P**

(43) Date of publication of application:
15.03.2017 Bulletin 2017/11

(60) Divisional application:
20184563.3

(73) Proprietor: **Board of Supervisors of Louisiana**
State University
And Agricultural and Mechanical College
Baton Rouge, LA 70808 (US)

(72) Inventor: **KOUSOULAS, Konstantin**
Baton Rouge, Louisiana 70810 (US)

(74) Representative: **Gauchet, Fabien Roland et al**
Brandon IP
64, rue Tiquetonne
75002 Paris (FR)

- **Brent Stanfield: "Vaccination with the HSV-1 Attenuated Virus VC2 Protects Mice against Lethal Challenge with Virulen HSV-1 and HSV-2 Strains (ID09)", 2013 Southeast Regional IDeA Meeting, 17 November 2013 (2013-11-17), page 51, XP055409749, Retrieved from the Internet: URL: [http://se13idea.uams.edu/Proceedings\(final 4\).pdf](http://se13idea.uams.edu/Proceedings(final%204).pdf) [retrieved on 2017-09-25]**
- **SAIED ET AL: "A replication competent HSV-1(McKrae) with a mutation in the amino-terminus of glycoprotein K (gK) is unable to infect mouse trigeminal ganglia after cornea infection", CURRENT EYE RESEARCH, INFORMA HEALTHCARE USA, US, vol. 39, no. 6, 1 January 2014 (2014-01-01), pages 596-603, XP008185311, ISSN: 0271-3683, DOI: 10.3109/02713683.2013.855238 [retrieved on 2014-01-08]**

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

- N. JAMBUNATHAN ET AL: "Site-Specific Proteolytic Cleavage of the Amino Terminus of Herpes Simplex Virus Glycoprotein K on Virion Particles Inhibits Virus Entry", JOURNAL OF VIROLOGY., vol. 85, no. 24, 15 December 2011 (2011-12-15), pages 12910-12918, XP055409910, US ISSN: 0022-538X, DOI: 10.1128/JVI.06268-11
- FOSTER TIMOTHY P ET AL: "Functional and physical interactions of the herpes simplex virus type 1 UL20 membrane protein with glycoprotein K", JOURNAL OF VIROLOGY, THE AMERICAN SOCIETY FOR MICROBIOLOGY, US, vol. 82, no. 13, 1 July 2008 (2008-07-01), pages 6310-6323, XP002587598, ISSN: 0022-538X, DOI: 10.1128/JVI.00147-08
- LYER ET AL.: 'Single dose of glycoprotein K (gK)-deleted HSV-1 live-attenuated virus protects mice against lethal vaginal challenge with HSV-1 and HSV-2 and induces lasting T cell memory immune responses.' VIROL J. vol. 10, no. 1, 2013, ISSN 1743-422X page 317, XP055235738
- SAIED ET AL.: 'A replication competent HSV-1(McKrae) with a mutation in the amino-terminus of glycoprotein K (gK) is unable to infect mouse trigeminal ganglia after cornea infection.' CURR EYE RES. vol. 39, no. 6, pages 596 - 603, XP008185311
- CHARLES ET AL.: 'Phenylalanine residues at the carboxyl terminus of the herpes simplex virus 1 UL20 membrane protein regulate cytoplasmic virion envelopment and infectious virus production.' J VIROL. vol. 88, no. 13, ISSN 0022-538X pages 7618 - 27, XP055235739
- STANFIELD ET AL.: 'A single intramuscular vaccination of mice with the HSV-1 VC2 virus with mutations in the glycoprotein K and the membrane protein UL20 confers full protection against lethal intravaginal challenge with virulent HSV-1 and HSV-2 strains.' PLOS ONE vol. 9, no. 10, 28 October 2014, page E109890, XP055235742
- J. M. Melancon ET AL: "Genetic Analysis of the Herpes Simplex Virus Type 1 UL20 Protein Domains Involved in Cytoplasmic Virion Envelopment and Virus-Induced Cell Fusion", JOURNAL OF VIROLOGY., vol. 78, no. 14, 15 July 2004 (2004-07-15) , pages 7329-7343, XP55409901, US ISSN: 0022-538X, DOI: 10.1128/JVI.78.14.7329-7343.2004

Remarks:

The file contains technical information submitted after the application was filed and not included in this specification