

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
20 September 2007 (20.09.2007)

PCT

(10) International Publication Number
WO 2007/104782 A1

(51) International Patent Classification:
C07K 14/11 (2006.01) **C12N 15/86** (2006.01)

(21) International Application Number:
PCT/EP2007/052429

(22) International Filing Date: 15 March 2007 (15.03.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
06111222.3 15 March 2006 (15.03.2006) EP
60/783,193 15 March 2006 (15.03.2006) US

(71) Applicant (for all designated States except US): **INTER-
VET INTERNATIONAL B.V.** [NL/NL]; P.O. Box 31,
Wim de Körverstraat 35, NL-5830 AA Boxmeer (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **RÖMER-
OBERDÖRFER, Angela** [DE/DE]; Boddenblick 5a,
17493 Greifswald-Insel Riems (DE). **VEITS, Jutta**
[DE/DE]; Boddenblick 5a, 17493 Greifswald-Insel Riems
(DE).

(74) Agents: **CLAESSENS, John** et al.; P.O. Box 31, NL-5830
AA Boxmeer (NL).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS,
JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS,
LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ,
NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU,
SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL,
PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- with sequence listing part of description published sepa-
rately in electronic form and available upon request from
the International Bureau

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: RECOMBINANT NEWCASTLE DISEASE VIRUS EXPRESSING H5 HEMAGGLUTININ OF AVIAN INFLUENZA
VIRUS

(57) Abstract: The present invention provides a method to produce a recombinant Mononegavirales virus vector harbouring an additional transcription unit comprising a foreign gene operatively linked with an upstream Mononegavirales virus gene start (GS) sequence and a downstream Mononegavirales virus gene end (GE) sequence, characterized in that the foreign gene sequence encodes a protein, which protein contains a stretch of at least three basic amino acids and the nucleotide sequence of the codons encoding these amino acids does not contain a sequence that can be recognized by the viral polymerase of the Mononegavirales virus as a gene end (GE) sequence.



WO 2007/104782 A1