



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/EP98/06610</p> <p>(22) International Filing Date: 19 October 1998 (19.10.98)</p> <p>(30) Priority Data: 1196/97 20 October 1997 (20.10.97) DK</p> <p>(71) Applicant (for all designated States except US): UNIVERSITA' DEGLI STUDI DI PADOVA [IT/IT]; Via VIII Febbraio, 2, I-35122 Padova (IT).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): INDRACCOLO, Stefano [IT/IT]; Via B. Colleoni, 41, I-35128 Padova (IT). MAM-MANO, Fabrizio [IT/FR]; 102, rue Legendre, F-75017 Paris (FR).</p> <p>(74) Agent: PIELKEN, Petra; Bavarian Nordic Research Institute GmbH, Fraunhoferstrasse 18b, D-82152 Martinsried (DE).</p>	<p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 1 July 1999 (01.07.99)</p>	
<p>(54) Title: A PACKAGING CELL LINE PRODUCING SIV-PSEUDOTYPED MLV</p>		
<p>(57) Abstract</p> <p>The present invention relates to a packaging cell line packaging an MLV-based recombinant retroviral genome into a particle comprising an SIV envelope, and a pseudotyped retroviral particle produced by the packaging cell line. Both, the packaging cell line and the retroviral particle, when comprising therapeutic genes, are especially useful for somatic gene therapy, preferably in mammals including humans.</p>		

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 98/06610

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 6 C12N5/10 C12N15/86 C12N15/33 C12N15/49 A61K48/00
 A61K39/21

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 IPC 6 C12N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>MAMMANO F M ET AL: "TRUNCATION OF THE HUMAN IMMUNODEFICIENCY VIRUS TYPE 1 ENVELOPE GLYCOPROTEIN ALLOWS EFFICIENT PSEUDOTYPING OF MOLONEY MURINE LEUKEMIA VIRUS PARTICLES AND GENE TRANSFER INTO CD4+ CELLS" JOURNAL OF VIROLOGY, vol. 71, no. 4, April 1997, pages 3341-3345, XP002074198 cited in the application see the whole document</p> <p style="text-align: center;">--- -/--</p>	1-19

Further documents are listed in the continuation of box C. Patent family members are listed in annex.

° Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search	Date of mailing of the international search report
30 April 1999	18/05/1999

Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer <p style="text-align: center;">Mateo Rosell, A.M.</p>
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INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 98/06610

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	<p>WO 97 17457 A (WHITEHEAD BIOMEDICAL INST ;UNIV WASHINGTON (US); ORY DANIEL S (US)) 15 May 1997 see abstract see page 2, line 20 - page 3, line 25 see page 5, line 16-34; figures 8,9</p>	1,4-10
A	<p>WO 94 11524 A (US GOV AS REPRESENTED BY THE) 26 May 1994 see page 2, paragraph 2 - page 3, paragraph 1 see page 6, paragraph 3-6 see page 12, paragraph 2 - page 13, paragraph 2</p>	1,4-6, 11-19
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International Application No

PCT/EP 98/06610

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>SCHNIERLE B S ET AL: "PSEUDOTYPING OF MURINE LEUKEMIA VIRUS WITH THE ENVELOPE GLYCOPROTEINS OF HIV GENERATES A RETROVIRAL VECTOR WITH SPECIFICITY OF INFECTION FOR CD4-EXPRESSING CELLS" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, vol. 94, August 1997, pages 8640-8645, XP002074100 see the whole document ----</p>	1-3, 11-13
A	<p>WILK T ET AL: "RETAINED IN VITRO INFECTIVITY AND CYTOPATHOGENICITY OF HIV-1 DESPITE TRUNCATION OF THE C-TERMINAL TAIL OF THE ENV GENE PRODUCT" VIROLOGY, vol. 189, 1992, pages 167-177, XP002074097 see the whole document ----</p>	1-3, 11-13
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No PCT/EP 98/06610

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