PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C12N 15/86, 7/00, 15/11, A61K 35/76 — A1

(11) International Publication Number: **WO 96/07748**

(43) International Publication Date: 14 March 1996 (14.03.96)

(21) International Application Number: PCT/EP95/03445

(22) International Filing Date: 1 September 1995 (01.09.95)

(30) Priority Data:
1017/94 2 September 1994 (02.09.94) DK

(71) Applicant *(for all designated States except US)*: GSF-FORSCHUNGSZENTRUM FÜR UMWELT UND GESUNDHEIT GMBH [DE/DE]; Ingolstädter Landstrasse 1, Neuherberg, D-85764 Oberschleissheim (DE).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: GÜNZBURG, Walter, Henry [GB/DE]; Mitterfeldstrasse 11, D-85229 Ainhofen (DE). SALLER, Robert, Michael [DE/DE]; Jutastrasse 22, D-80636 München (DE).

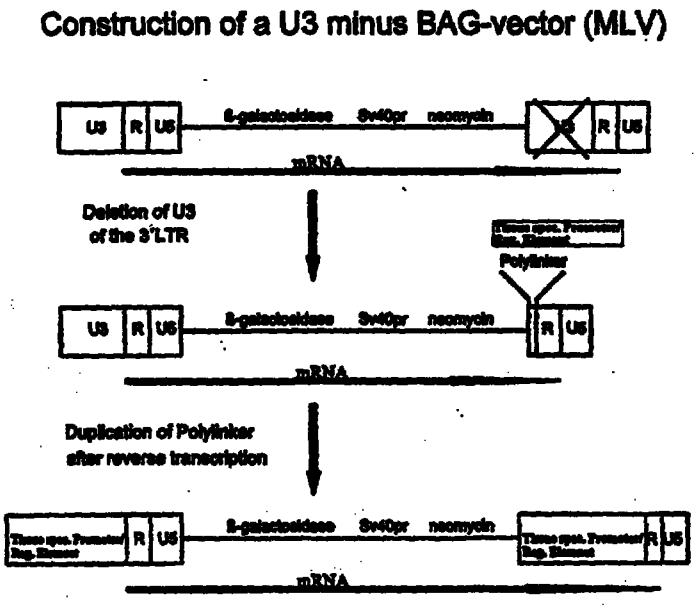
(74) Agent: BEHNISCH, Werner; Friedrichstrasse 31, D-80801 München (DE).

(81) Designated States: AM, AU, BB, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LV, MD, MG, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TT, UA, UG, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ, UG).

Published
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.

SG 9700730-6

(54) Title: NON SELF-INACTIVATING, EXPRESSION TARGETED RETROVIRAL VECTORS



(57) Abstract

The present invention relates to a retroviral vector undergoing promoter conversion comprising a 5'LTR region of the structure U3-R-U5; one or more sequences selected from coding and non-coding sequences; and a 3'LTR region comprising a completely or partially deleted U3 region wherein said deleted U3 region is replaced by a polylinker sequence, followed by the R and U5 region. Said retroviral vector undergoes promoter conversion and is useful as a gene transfer vehicle for targeted gene therapy.