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(54) Title: HERPES SIMPLEX VIRUS AMPLICON VECTOR TARGETING SYSTEM AND METHOD OF USING SAME

(57) Abstract: The present invention relates to herpes simplex virus (HSV) amplicon vectors, and in particular, HSV-1 amplicon vectors, which have been genetically modified and used alone or with consequent genetically modified HSV virus, to target a selected cell type, such as neoplastic cells. The present invention also relates to methods of using such vectors to target a cell, in order to treat a pathologic condition, such as cancer.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/16050**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : C12N 15/869, 15/64, 5/10; C12Q 1/70; A61K 48/00

US CL : 435/320.1, 325, 455, 456, 5, 6; 424/93.2, 93.6

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)

U.S. : 435/320.1, 325, 455, 456, 5, 6; 424/93.2, 93.6

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 practicable, search terms used)

Dialog, WEST1.1, Medline, Biotech, Biosci, Biosis

Search terms: herpes simplex virus, amplicon, targeting domain, glycoprotein C, gene therapy

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WANG et al. A hybrid herpesvirus infectious vector based on Epstein-Barr Virus and herpes simplex virus type 1 for gene transfer into human cells in vitro and in vivo. Journal of Virology. December 1996, Vol. 70, pages 8422-8430, especially Fig. 1 and pages 8428 and 8430.	1-26
A	US 5,501,979 A (GELLER et al.) 26 March 1996, Fig. 1 and columns 10-12.	1-39
A	US 5,869,331 A (DORNBURG) 09 February 1999, Figs. 4A and 4B and columns 8-9.	1-26

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

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A document defining the general state of the art which is not considered to be of particular relevance	*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
B earlier document published on or after the international filing date	*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
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)	*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
O document referring to an oral disclosure, use, exhibition or other means	*Z* document member of the same patent family
P document published prior to the international filing date but later than the priority date claimed	

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/16050

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	TAL-SINGER et al. Interaction of herpes simplex virus glycoprotein gC with mammalian cell surface molecules. Journal of Virology. July 1995, Vol. 69, No. 7, pages 4471-4483, especially the Abstract and pages 4480-4481.	2-7, 15,