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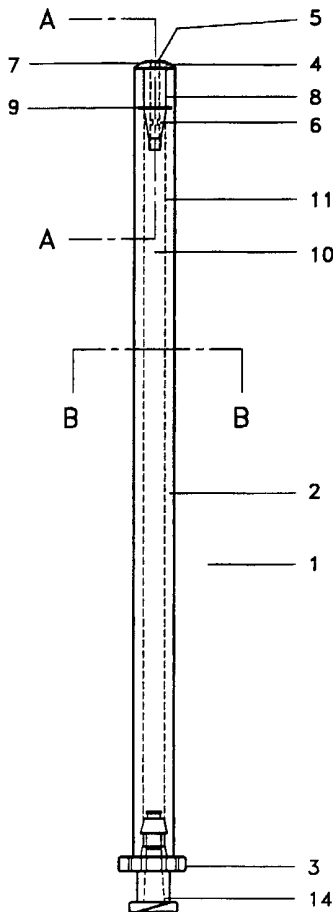
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[Continued on next page]

(54) Title: INTRANASAL DELIVERY SYSTEM



(57) Abstract: This invention relates to apparatus and methods of delivering various compositions including medicaments to a variety of targets. The invention includes a dose administrator (1) which may be used for intranasal delivery of compositions or medicaments, such as live virus vaccines, to both humans and animals. An axial collapse prevention element (2) to prevent excessive axial deflection of the dose administrator (1) or a dose-location coordinate indicator (3) to facilitate the delivery of a dose to the desired target location may be coupled to the dose administrator (1). An intranasal probe (4) having a force dissemination contact surface (7) may be responsive to a first end of the dose administrator (1). The dose may be delivered from a conformable dose sequestration element (10) through an aperture which penetrates the dose delivery aperture element (5) and the dose may be caused to stream by coupling a stream delivery element (6) to the dose delivery aperture element (5). The force application element (12) which acts upon the dose may be separated from the dose by a fluid dose propellant (13). While the invention may be used for numerous applications, it specifically addresses the difficulties of delivering cold-adapted live equine influenza viruses intranasally to equids.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/26870

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61M 11/00
 US CL : 604/240

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. : 604/240

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 NONE

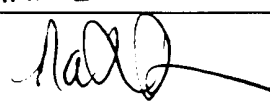
C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,720,762 A (BASS) 24 February 1998, see entire patent.	1-202
Y	US 5,601,077 A (IMBERT) 11 February 1997, see entire patent.	1-202

Further documents are listed in the continuation of Box C:

See patent family annex.

Special categories of cited documents:	Symbol	Description
"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
"E" earlier application or patent 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	"&"	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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Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer Manuel Mendez  Telephone No. (703) 308-2221