



(12) **EUROPEAN PATENT APPLICATION**  
published in accordance with Art. 158(3) EPC

(43) Date of publication:  
**06.02.2002 Bulletin 2002/06**

(51) Int Cl.<sup>7</sup>: **A61D 19/02, A61D 19/04**

(21) Application number: **00972916.1**

(86) International application number:  
**PCT/ES00/00423**

(22) Date of filing: **03.11.2000**

(87) International publication number:  
**WO 01/52767 (26.07.2001 Gazette 2001/30)**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE TR**  
Designated Extension States:  
**AL LT LV MK RO SI**

- **VAQUEZ ROJAS, Juan Maria**  
**E-30500 Molina de Segura, Murcia (ES)**
- **ROCA ALEU, Jorge**  
**E-30500 Molina de Segura, Murcia (ES)**
- **VAZQUEZ ROJAS, José Luis**  
**E-03203 Elche, Alicante (ES)**

(30) Priority: **20.01.2000 ES 200000114**

(74) Representative: **Ungria Lopez, Javier et al**  
**Avda. Ramon y Cajal, 78**  
**28043 Madrid (ES)**

(71) Applicant: **Universidad de Murcia**  
**30003 Murcia (ES)**

(72) Inventors:  
• **MARTINEZ GARCIA, Emilio**  
**E-30500 Molina de Segura, Murcia (ES)**

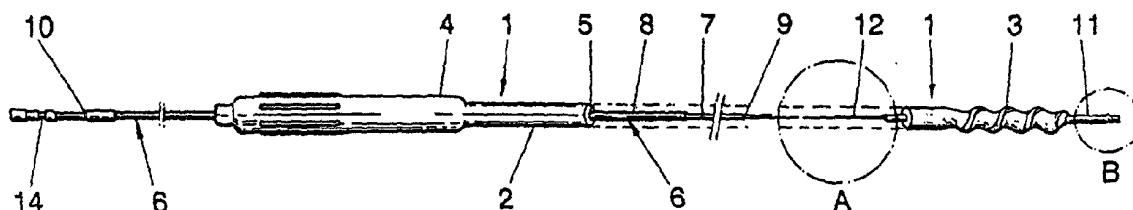
(54) **DEVICE AND METHOD FOR INTRODUCING AND/OR COLLECTING FLUIDS FROM THE INTERIOR OF THE UTERUS OF AN ANIMAL**

(57) It comprises a tube or catheter (1) that is introduced into the animal's vagina up to the cervix duct (19); characterized in that it additionally comprises a flexible probe (6) constituted of a first flexible tubular body (12), and the outside of which is covered by a layer of a flexible material; all to allow that the probe, after reaching the distal end of the tube (1), may progress through the cervix duct (19) and thereafter through the cervix horn (22). This structure allows to introduce a fluid with spermatozooids, embryos or therapeutic solutions to the an-

terior third of the uterus horn, or to obtain embryos from the anterior portions of the uterus horn, and all this without sedation or anesthesia and without disturbing the animal's well-being.

To facilitate obtaining embryos, the probe includes an elastic small external coating (28) that is inflated through a flexible tube (27) for adapting itself to the uterus horn (22) preventing refluxes when carrying out absorption.

It is essentially applied to porcine livestock, small ruminants and any other animal species.



**FIG. 1**

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/ES 00/000423

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC 7 : A 61D 19/02, 19/04 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) IPC 7 : A 61D 19/02, 19/04 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) CIBEPAT, EPOQUE		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4100923 A ( EDWARD M SOUTMERN) 18 July 1978 (18.07.78)	
A	US 4173227 A (ROBERT E.J. LASSOU et.al) 6 November 1979 (06.11.79)	
A	EP 0214043 A1 (INSTITUTE NATIONAL DE LA RECHERCHE AGRONOMIQUE) 11 March 1987(11.03.87)	
A	US 4701164 A (ROBERT CASSOU et.al) 20 October 1987 (20.10.87)	
A	EP 0478155 A1 (OVAMED CONPORATION) 1 April 1992 (01.04.92)	
A	US 5249610 A (ROBERT CASSOU et.al) 5 October 1993 (05.10.93)	
A	EP 0803237 A1 (TURIN ENRIQUE MORACIO) 29 October 1997 (29.10.97)	
A	US 5916144 A (JEWEN LI et al) 29 June 1999 (29.06.99)	
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "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) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "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 "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 "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 "&" document member of the same patent family		
Date of the actual completion of the international search 2 February 2001 (02.02.01)		Date of mailing of the international search report 16 February 2001 (16.02.01)
Name and mailing address of the ISA/ S.P.T.O		Authorized officer
Facsimile No.		Telephone No.

Form PCT/ISA/210 (second sheet) (July 1992)