

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/BR2017/050055

A. CLASSIFICATION OF SUBJECT MATTER <b>C05F17/00 (2006.01), C05F15/00 (2006.01), C05G5/00 (2006.01), C05F11/02 (2006.01), C05F5/00 (2006.01), C05F7/00 (2006.01), C05F3/00 (2006.01)</b> 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) <b>C05F, C05G</b>		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched <b>Base de Patentes INPI-BR, ScienceDirect, Portal Capes</b>		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) <b>Epodoc, Google Patents, USPTO, Thomson Innovation</b>		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6287496 B1 (BENE TECH INC [US]) 11 September 2001 (2001-09-11)	1 to 10
Y	(the whole document)	11 to 22
A	RU 2121489 C1 (SIB NI SKIJ I TORFA) 10 November 1998 (1998-11-10)	1 to 10
Y	(the whole document)	11 to 22
A	CN 102515897 A (DEWEN QIU ) 27 June 2012 (2012-06-27)	1 to 10
Y	(the whole document)	11 to 22
<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	"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 but 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	
Date of the actual completion of the international search 17 April 2017	Date of mailing of the international search report 26/04/2017	
Name and mailing address of the ISA/ BR INSTITUTO NACIONAL DA PROPRIEDADE INDUSTRIAL Rua Sao Bento nº 1, 17º andar cep: 20090-010, Centro - Rio de Janeiro/RJ Facsimile No. +55 21 3037-3663	Authorized officer <b>Gilson da Silva</b> Telephone No. +55 21 3037-3493/3742	

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

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US 6287496 B1	2001-09-11	None	
RU 2121489 C1	1998-11-10	RU 94040127 A	1996-10-10
CN 102515897 A	2012-06-27	CN 102515897 B	2013-12-04