

INTERNATIONAL SEARCH REPORT

International application No.
PCT/BR2021/050155

A. CLASSIFICATION OF SUBJECT MATTER

IPC: A47K 13/14 (2006.01), E03D 9/00 (2006.01)

CPC: A47K 13/14, E03D 9/00

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)

A47K, E03D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Base de dados do INPI-BR

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DERWENT, ESPACENET

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2012131740 A1 (RONE THOMAS MICHAEL [US]) 31 May 2012 (2012-05-31)	1, 2, 3
A	Abstract, See Description (paragraphs 10 and 25-24), figures 1-8	4, 5, 6, 7, 8
X	US 2012246811 A1 (SAYRE MARTHA [US]) 04 October 2012 (2012-10-04)	2
A	Abstract, See Description (paragraphs 19-30), figures 1-4	1, 3, 4, 5, 6, 7, 8
X	BR 102018012013 A2 (JOSEFA TOMAZ PEREIRA DE SOUZA [BR]) 07 January 2020 (2020-01-07)	2
A	Abstract, See Description (pages 1-4), figures 1-4	1, 3, 4, 5, 6, 7, 8
X	US 2011271433 A1 (ASPIRO STÉPHANIE [US]) 10 November 2011 (2011-11-10)	2
A	Abstract, See Description (paragraphs 38-49), figures 1-8	1, 3, 4, 5, 6, 7, 8



Further documents are listed in the continuation of Box C.



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 application or patent 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

05.08.21

Date of mailing of the international search report

18.12.21

Name and mailing address of the ISA /
INSTITUTO NACIONAL DA
PROPRIEDADE INDUSTRIAL
Rua Mayrink Veiga nº 9, 6º andar
cep: 20090-910, Centro - Rio de Janeiro/RJ
Facsimile No. +55 21 3037-3663

Authorized officer

Luiz Claudio Marini Silva

Telephone No.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/BR2021/050155

Patent document cited in the search report	Publication date	Patent family member(s)	Publication date
US 2012131740 A1 -----	2012-05-31 -----	None -----	-----
US 2012246811 A1 -----	2012-10-04 -----	None -----	-----
BR 102018012013 A2 -----	2020-01-07 -----	None -----	-----
US 2011271433 A1 -----	2011-11-10 -----	US 8621675 B2 -----	2014-01-07 -----