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(54) Title: DEVICE FOR REDUCING FIBROUS PRODUCTS

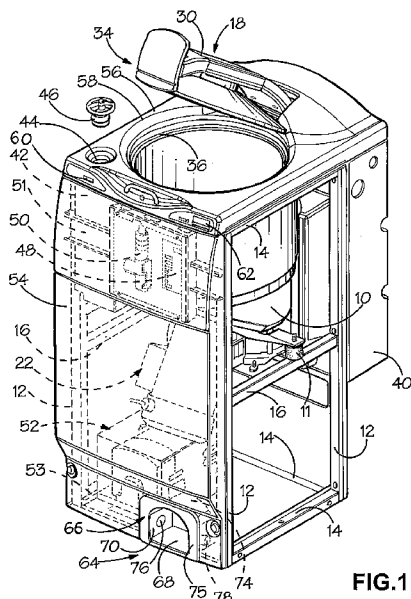


FIG. 1.

(57) Abstract: A macerator has a housing (10) having an opening which provides access to its interior and a releasably securable lid (18) for releasably closing the opening in the housing. A foot-operated contactless infra red switch (64) is provided at the base of the macerator which is adapted to release a solenoid-operated latch (50) upon completion of the maceration cycle. The macerator also has a rotatable blade mounted within the housing (10). The blade is rotated by means of a three-phase motor. The macerator also has means (52) for converting a single-phase electrical power supply to a three-phase power supply for the motor.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER INV. B02C19/00 B02C18/00 B02C23/04 B02C18/24				
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) B02C A61L A61M B09B				
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 practical, search terms used) EPO-Internal				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X	US 3 463 405 A (SHEPHERD THOMAS CROPPER RYLEY) 26 August 1969 (1969-08-26) the whole document	1,11		
X	JP 2003 211016 A (INAX CORP) 29 July 2003 (2003-07-29) abstract	1		
X	US 4 269 364 A (MORICONI DARIO J ET AL) 26 May 1981 (1981-05-26) column 4, line 41 - column 5, line 52; figures	1,23		
Y	GB 1 209 766 A (VERNON & CO PULP PROD) 21 October 1970 (1970-10-21) the whole document	1-16,23		
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<input checked="" 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 :				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none; vertical-align: top;"> *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 </td> <td style="width: 50%; border: none; vertical-align: top;"> *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 </td> </tr> </table>			*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
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		Date of mailing of the international search report		
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040. Fax: (+31-70) 340-3016		Authorized officer Leitner, Josef		

INTERNATIONAL SEARCH REPORT

International application No
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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Y	GB 1 421 771 A (HAIGH ENG CO LTD) 21 January 1976 (1976-01-21) figures 1,3,4 -----	1-16,23
Y	US 4 883 189 A (LOEBBERT JOHANNES [DE]) 28 November 1989 (1989-11-28) column 3, line 12 - line 27 column 4, line 40 - line 42 abstract; figures -----	1-16,23
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Y	JP 2005 211821 A (TOKYO SHIBAURA ELECTRIC CO; TOSHIBA CONSUMER MARKETING; TOSHIBA KADEN) 11 August 2005 (2005-08-11) paragraph [0006] - paragraph [0007] paragraph [0017] paragraph [0019]; figures 1,2 abstract -----	17-22
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INTERNATIONAL SEARCH REPORT

International application No.
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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-16,23

a macerator comprising a housing, an opening in the housing providing access to its interior, a releasably securable closure for releasably closing the opening in the housing and a contactless switch for controlling a function of the macerator

2. claims: 17-23

a macerator comprising a housing, an opening in the housing providing access to its interior, a releasably securable closure for releasably closing the opening in the housing, movable blade means within the housing, a multi-phase electric motor adapted to move the blade means and means for converting an electrical power supply of a different number of phases from that of the electric motor to the same number of phases as that of the electric motor

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2008/050346

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