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EUROPEAN PATENT APPLICATION

21 Application number: 86111431.2

51 Int. Cl.⁴: **D 06 F 37/26**

22 Date of filing: 19.08.86

30 Priority: 05.09.85 IT 4573385

43 Date of publication of application:
 18.03.87 Bulletin 87/12

84 Designated Contracting States:
 AT BE CH DE FR GB IT LI LU NL SE

71 Applicant: Zanussi Elettrodomestici S.p.A.
 Via Giardini Cattaneo, 3
 I-33170 Pordenone-C.P. 147(IT)

72 Inventor: Durazzani, Piero
 Via Lazio 7
 I-33080 Porcia Pordenone(IT)

74 Representative: Patentanwälte Grünecker, Kinkeldey,
 Stockmair & Partner
 Maximilianstrasse 58
 D-8000 München 22(DE)

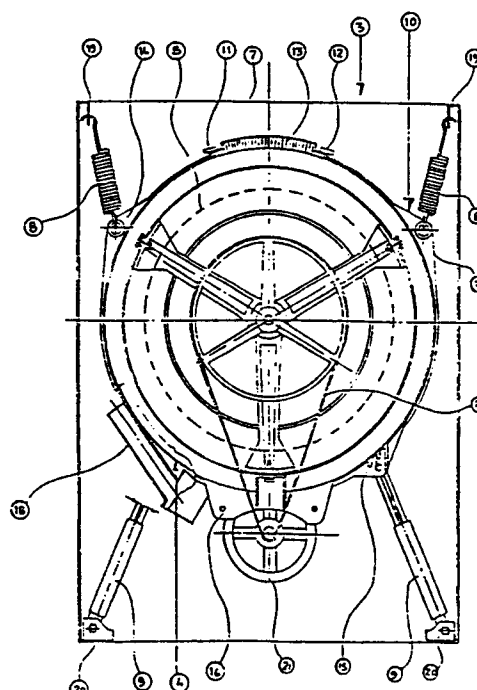
54 Laundry washing machine.

57 A laundry washing machine comprising a laundering tub (4) and a circular hoop (10) made of a plastic material and adapted to be removably secured to the tub (4) in intimate engagement with the outer periphery thereof.

In particular, the hoop is integrally formed with a number of brackets (14, 15) and a pair of lugs (16, 17) as well as with a pressure-sensing dome (18) for the connection thereto of a pressure switch.

In this manner, the tub (4) can be mounted within the housing (7) of the machine by suspension springs (8) engaging respective brackets (14) from above, and vibration dampener elements (9) hingedly connected to respective brackets (15).

The tub may additionally carry the motor (21) for rotating the drum (5) by the connection of the motor to the pair of lugs (16, 17).



F'G. 1

1 Description

The invention relates to a laundry washing machine equipped with a conventional laundering tub mounted in the housing
5 of the machine in a novel manner.

Conventional laundry washing machines for domestic use are equipped with a metal laundering tub provided with suitable ballast weights and adapted to contain a rotatable drum.
10 The tub is mounted in the housing of the machine by upper suspension springs and lower vibration dampeners adapted to engage suitable metal brackets secured to the outer periphery of the tub and to the interior of the housing, respectively.

15 The conventional laundering tub is additionally provided with further brackets or lugs secured to its outer periphery for mounting a motor assembly required for rotating the drum, and a pressure-sensing outlet for the connection thereto of a pressure switch.
20

Although a laundering tub of this construction is highly efficient and reliable in operation, there is the disadvantage that it has to assume the function of the carrying structure for the above described elements, by
25 reason of which it has to be made with a considerable wall thickness for enabling it to sustain the relatively high mechanical stresses during the laundering and spinning operations.

30 Consequently these laundering tubs require a considerable amount of material for their manufacture.

In addition, the various lugs, brackets and the like have to be prepared separately and to be subsequently secured to the tub in a time-consuming and cumbersome operation,
35 resulting in a complicated structure.

It is an object of the invention to overcome the above described deficiencies by providing a laundry washing

1 machine provided with novel means for mounting the launder-
ing tub within the housing of the machine, thus permitting
the wall thickness of the tub to be reduced, and the
application of the described brackets, lugs and the like
5 to the outer periphery of the tub to be avoided.

These and other objects are attained according to the
invention by a laundry washing machine comprising a
laundering tub adapted to contain a drum mounted therein
10 for rotation by means of at least one electric motor of
conventional type supported by associated lugs, said tub
being mounted in the housing of the machine by means of
suspension elements from above and vibration dampener
elements of conventional type from below, said elements
15 being adapted to be engaged with associated brackets, said
machine being additionally provided with a pressure-sensing
dome for the connection thereto of a pressure switch of
conventional type, and being characterized by comprising
at least one circular hoop of a plastic material adapted
20 to be removably secured to the outer periphery of the tub
in intimate engagement therewith, said hoop being integ-
rally provided with said lugs, said brackets and said
bressure-sensing dome, and being additionally formed with
two backwards folded end portions adapted to be connected
25 to one another by resilient means.

The characteristics and advantages of the invention will
become more clearly evident from the following description,
given by way of example with reference to the accompany-
ing drawings, wherein:

30 fig. 1 shows a partially sectioned diagrammatic rear view
of a laundry washing machine as a preferred embodi-
ment of the invention, and
fig. 2 shows a diagrammatical sideview of a structural
particular of the machine of fig. 1.
35

With reference to the drawings, there is diagrammatically
shown a domestic laundry washing machine 3 of the front-
loading type, provided with a metal laundering tub 4

1 adapted to contain a rotatable drum 5 and mounted within
the housing 7 of the machine by means of upper suspension
springs 8 and lower vibration dampeners 9 or similar
elements of conventional type.

5

In particular, the mounting of tub 4 is accomplished by
means of a circular hoop 10 made of a plastic material and
being of a smaller width than said tub, said hoop 10 being
adapted to be removably secured to tub 4 in intimate
10 engagement with the outer periphery thereof.

Hoop 10 is formed with two backwards bent end portions 11
and 12 adapted to be connected to one another by at least
one tension spring 13 or the like for clamping hoop 10 in
position on tub 4.

15

Integrally formed with hoop 10 are two pairs of brackets
14 and 15, two parallel lugs 16 and 17, and at least one
pressure-sensing dome 18 for the connection thereto of a
conventional pressure switch (not shown).

20

The pair of brackets 14 is adapted to be engaged by
respective ends of suspension springs 8, the other ends
of which are engaged with respective metal brackets 19
secured to upper portions of housing 7 of the machine.

25

The pair of brackets 15 on its part is adapted to have
respective ends of vibration dampeners 9 hinged thereto,
the other ends of vibration dampeners 9 being hinged to
respective bearing brackets 20 secured to lower portions
of housing 7.

30

Lugs 16 and 17 finally serve for supporting a conventional
electric motor 21 required for rotating drum 5 by means of
a belt transmission 22 in a per se known manner.

35

Thanks to the provision of hoop 10 functioning as the
carrying structure for the tub and drum assembly and for
motor 21 and including pressure-sensing dome 18, it is
thus possible to make the tub itself with a reduced wall

1 thickness, resulting in a saving of material for its
manufacture.

The hoop, on the other hand, is a separately foremd unit
5 adapted to be applied to the tub by an automatized process
by means of a robot or a similar machine.

Thanks to the fact, finally, that the hoop is provided with
the brackets, lugs and the like, these elements do not
10 have to be secured to the tub, resulting in a greatly
simplified construction thereof.

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GRÜNECKER, KINKELDEY, STOCKMAIR & PARTNER

PATENTANWALTE

EUROPEAN PATENT ATTORNEYS

A. GRÜNECKER DIP. ING.
 DR. H. KINKELDEY DIP. ING.
 DR. W. STOCKMAIR DIP. ING. A.E.E. (CALTECH)
 DR. K. SCHUMANN, DIP. PHYS.
 P. H. JAKOB DIP. ING.
 DR. G. BEZOLD, DIP. CHEM.
 W. MEISTER DIP. ING.
 H. HILGERS, DIP. ING.
 DR. H. MEYER-PLATH, DIP. ING.
 DR. M. BOTT-BODENHAUSEN DIP. PHYS.
 DR. U. KINKELDEY, DIP. BIO.

*LICENCIÉ EN DROIT DE L'UNIV. DE GENÈVE

8000 MUNICHEN 22
 MAXIMILIANSTRASSE 56

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5 Zanussi Elettrodomestici S.p.A.
 Via Giardini Cattaneo, 3
 33170 Pordenone-C.P. 147
 Italy

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EP 3024

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20 Laundry Washing Machine

Patent Claims

1. A laundry washing machine comprising a laundering
 25 tub adapted to contain a drum mounted therein for rotation
 by means of at least one electric motor of conventional
 type supported by associated lugs, said tub being mounted
 in the housing of the machine by means of suspension
 elements above and by means of vibration dampener elements
 30 of conventional type from below, said elements being adapted
 to be engaged with associated brackets, said machine being
 additionally provided with a pressure-sensing dome for the
 connection thereto of a pressure switch of conventional
 type, and being characterized by comprising at least one
 35 circular hoop (10) of a plastic material adapted to be
 removably secured to the outer periphery of said tub (4)
 in intimate engagement therewith, said hoop (10) being
 integrally provided with said lugs (16, 17), said brackets

1 (14, 15) and said pressure-sensing dome (18), and being
additionally formed with two backwards folded end portions
(11, 12) adapted to be connected to one another by
resilient means (13).

5

2. A laundry washing machine according to claim 1,
characterized in that said resilient means comprises at
least one tension spring (13).

3. A laundry washing machine according to the pre-
10 ceeding claims, substantially as described with reference
to the accompanying drawings and for the specified purposes.

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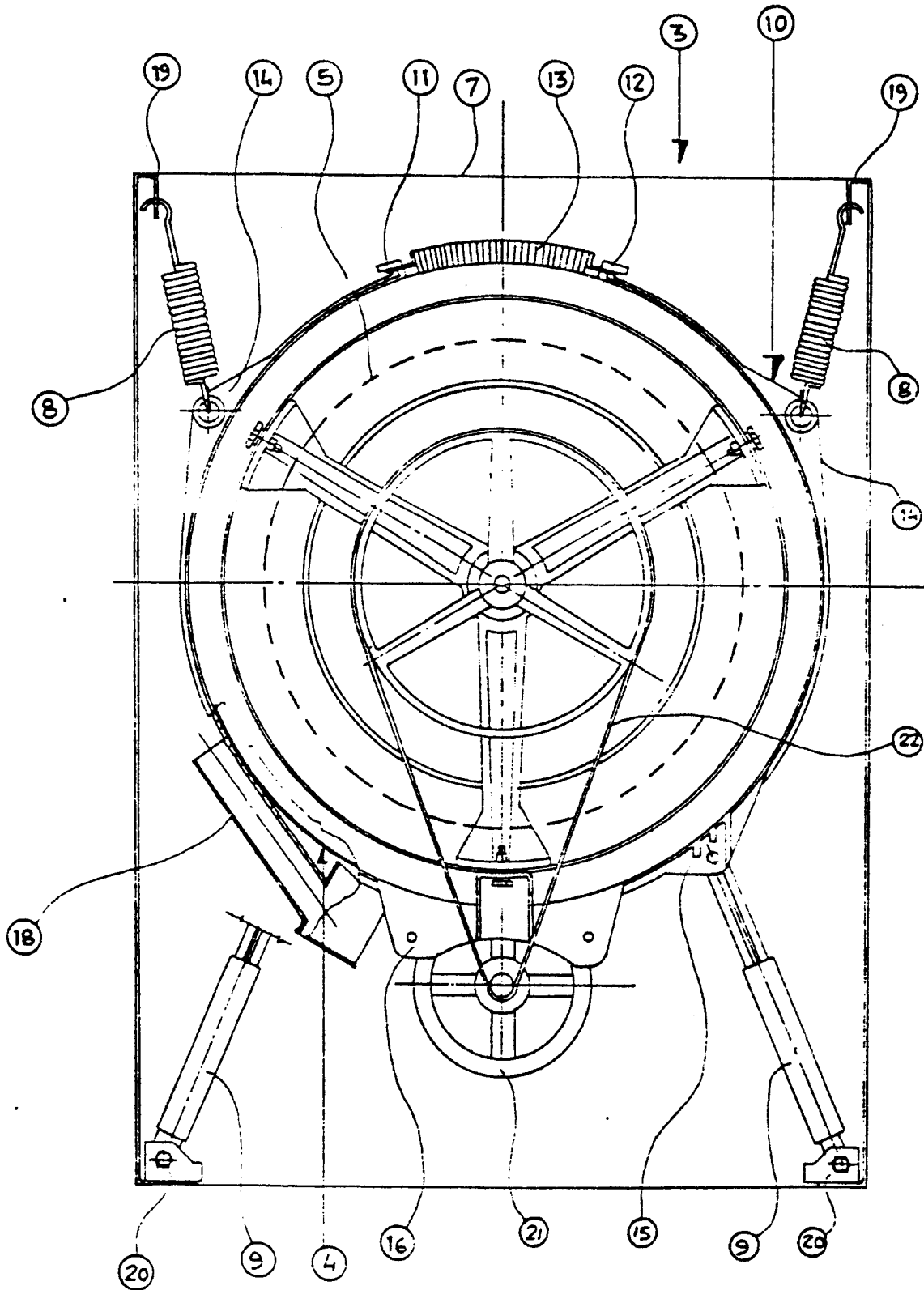


FIG. 1

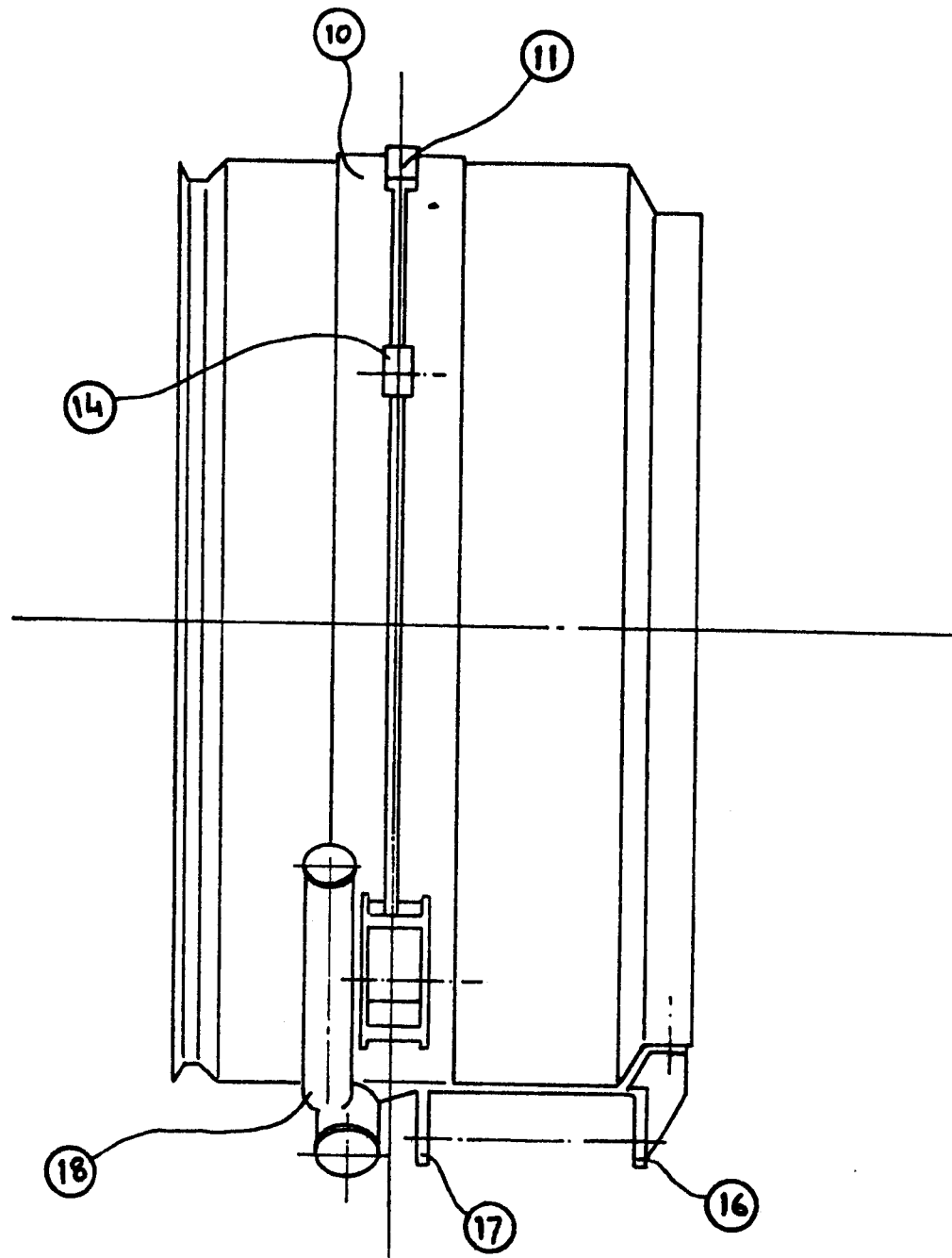


FIG. 2