

19



Europäisches Patentamt
European Patent Office
Office européen des brevets

11 Publication number:

**0 370 981
A1**

12

EUROPEAN PATENT APPLICATION

21 Application number: 89850386.7

51 Int. Cl.⁵: **A47L 9/00, A47L 9/32**

22 Date of filing: 07.11.89

30 Priority: 23.11.88 SE 8804227

43 Date of publication of application:
30.05.90 Bulletin 90/22

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

71 Applicant: **AKTIEBOLAGET ELECTROLUX**
Luxbacken 1
S-105 45 Stockholm(SE)

72 Inventor: **Földes, Kazimir**
Holmvägen 8
S-194 35 Upplands Väsby(SE)

74 Representative: **Hagelbäck, Evert Isidor et al**
c/o AB Electrolux Corporate Patents &
Trademarks
S-105 45 Stockholm(SE)

54 **Pressure control device for suction cleaner.**

57 A device for controlling the suction power of a suction cleaner comprises a slide valve (13) cooperating with an opening (14) in the wall of a suction tube (10) and adapted to be opened to allow atmospheric air to flow into the suction tube. According to the invention, the suction tube is provided with a handle (12) which is preferably made as a pistol-butt and provided with a control means (16) connected to the slide valve.

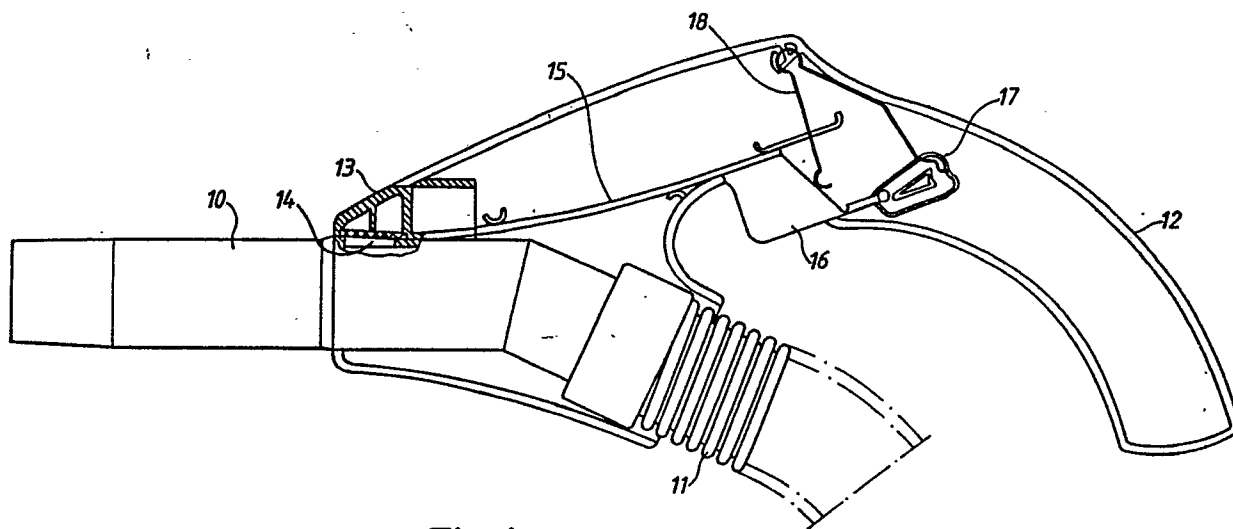


Fig.1

EP 0 370 981 A1

Pressure control device for suction cleaner

The present invention relates to a pressure control device for a suction cleaner, comprising a valve provided on a suction tube and adapted to be opened to allow atmospheric air to flow into said suction tube.

Pressure controls of this kind are previously known which comprise a movable slide cooperating with an opening in the wall of the suction tube. By manual displacement of the slide the opening is uncovered in order to reduce the suction power as required.

The object of the present invention is to simplify the control of the pressure reduction valve in order to facilitate the cleaning operation. This has been obtained by a pressure control of the kind mentioned in the introduction which according to the invention is characterized by a handle which is fixed to said suction tube and extends therefrom in spaced relationship, said handle having a control means connected to said valve.

The invention will be described in more detail in the following with reference to the accompanying drawings on which Figures 1 and 2 illustrate longitudinal sections of the pressure control device according to the invention in two different positions.

The device illustrated in the drawings comprises a suction tube 10 connected to a partially shown suction hose 11 which in turn is to be connected to a suction cleaner (not shown). The suction tube 10 is connected to a handle 12 which is formed as a pistol-butt. For controlling the under-pressure in the suction tube 10 and hence the suction power of the suction cleaner a valve means 13 is provided which is made as a slide movable in the longitudinal direction of the suction tube and cooperating with an opening 14 in the tube wall. The slide 13 is connected by means of a tension bar 15 to a control means 16 provided in the handle 12 and made as a trigger. The control means 16 is provided with a catch mechanism 17 of a known type.

In Figure 1, the device is shown with the valve 13 in its closed position in which it is held by means of a return spring 18 actuating the control means 16.

The valve is opened by squeezing the control means 16 against the action of the spring 18 whereby the device takes the position shown in Figure 2. In this position, the control means 16 is hitched by the catch mechanism 17 whereby vacuum cleaning can take place at a reduced suction power. When higher suction power is required, the control means 16 is squeezed again whereby the catch mechanism 17 is released and the valve returns to the closed position in Figure 1 as a

consequence of the actuation by the spring 18.

Claims

1. Pressure control device for a suction cleaner, comprising a valve (13) provided on a suction tube (10) and adapted to be opened to allow atmospheric air to flow into said suction tube, **characterized** by a handle (12) which is fixed to said suction tube and extends therefrom in spaced relationship, said handle having a control means (16) connected to said valve.

2. Device according to claim 1, **characterized** in that the control means (16) is provided with a catch mechanism (17) and a return spring (18) enabling adjustment of the valve between closed and open positions.

3. Device according to claim 1 or 2, **characterized** in that the valve (13) comprises a slide adapted to cooperate with an opening (14) in the wall of the suction tube (10).

4. Device according to any of claims 1 - 3, **characterized** in that the handle (12) is made as a pistol-butt with the control means (16) arranged as a trigger.

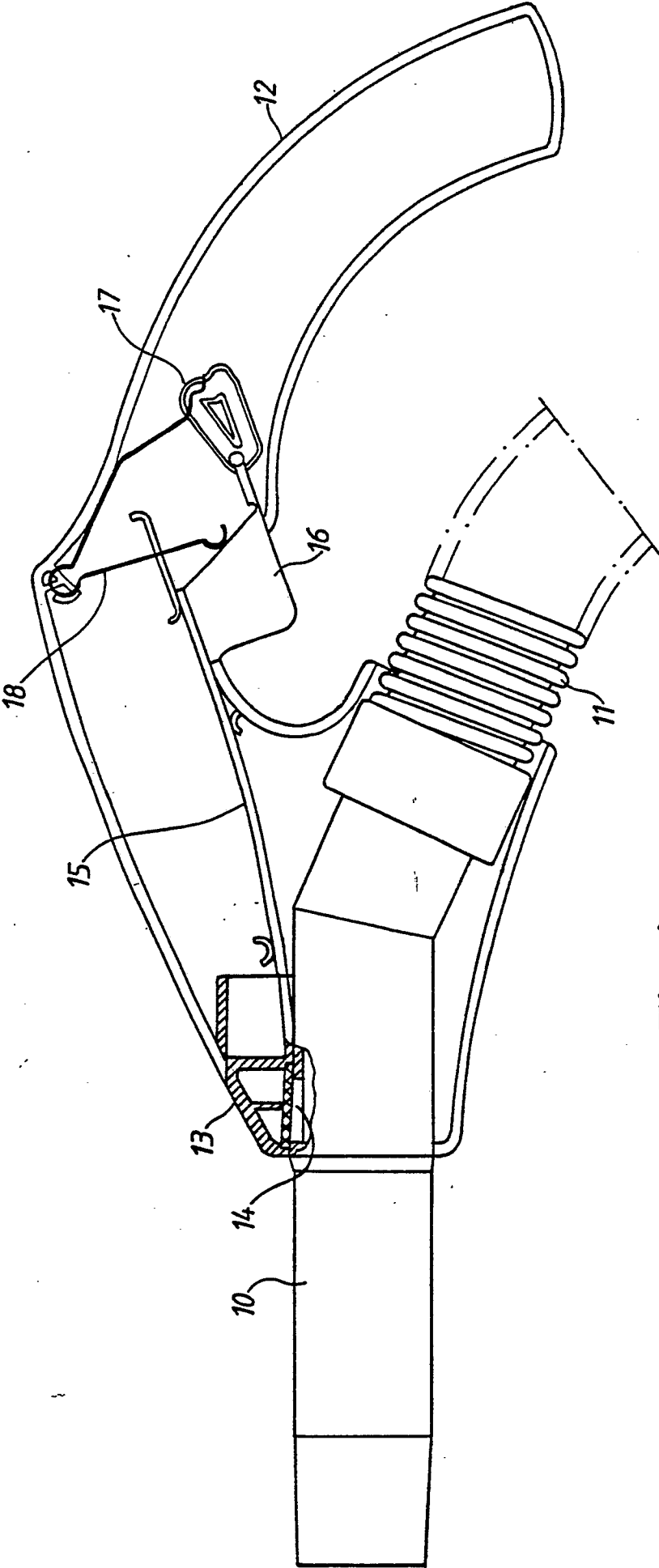


Fig.1

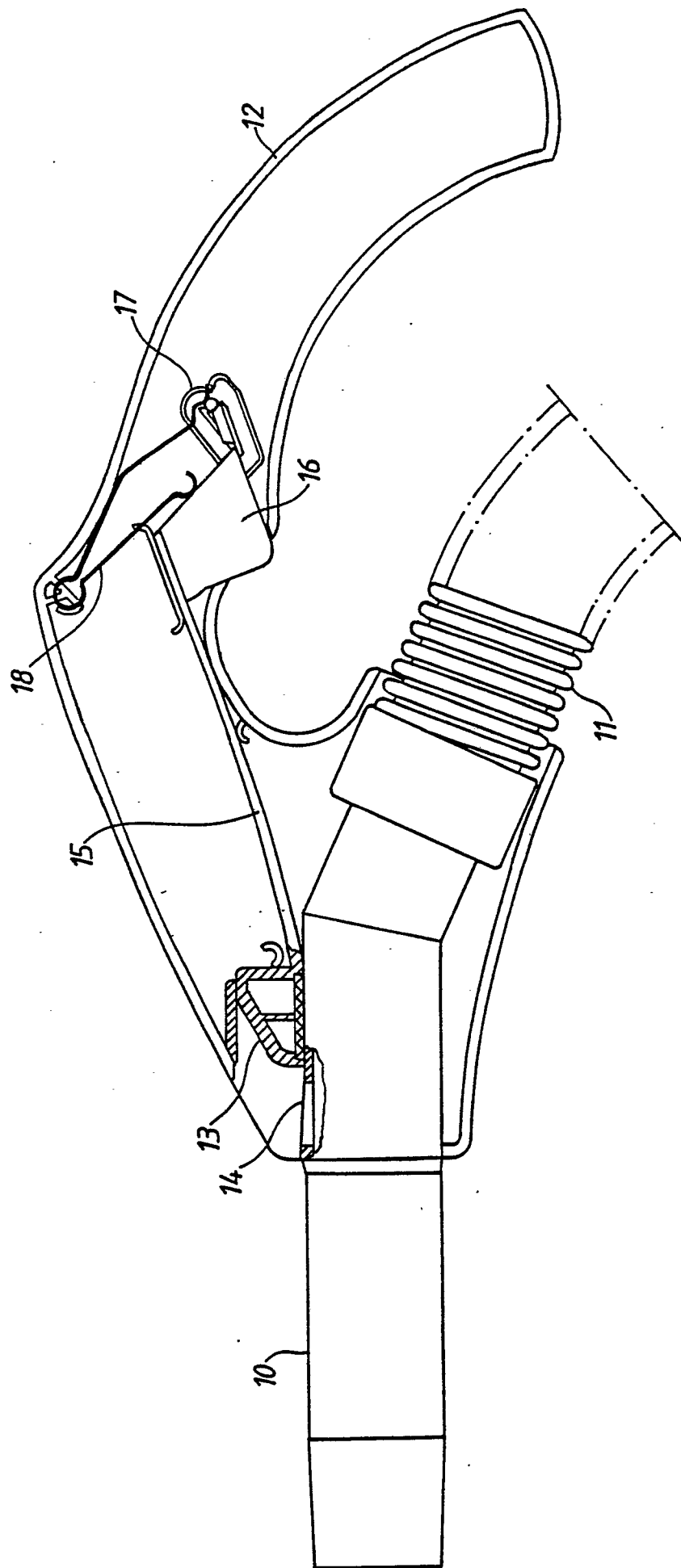


Fig. 2



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	US-A-1 196 414 (E.L.B. ZIMMER) * figure 2; claims 1-3 * ---	1	A 47 L 9/00 A 47 L 9/32
A	DE-C- 217 023 (BALLY & OELHAFEN) * figure; claim * ---	1	
A	FR-A-1 086 685 (HOOVER LTD.) * figures 1-4 * ---	1,3	
A	DE-A-3 140 131 (LICENTIA) * figure 1; claim 1 * -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			A 47 L
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 02-02-1990	Examiner KANAL P K
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			