



⁽¹⁾ Publication number:

0 444 516 A3

(2) EUROPEAN PATENT APPLICATION

(21) Application number: 91102452.9 (51) Int. Cl.⁵: A47L 5/28

2 Date of filing: 20.02.91

30 Priority: 01.03.90 US 486936

43 Date of publication of application: 04.09.91 Bulletin 91/36

Designated Contracting States:
 DE ES FR GB IT NL SE

Date of deferred publication of the search report: 03.06.92 Bulletin 92/23 Applicant: White Consolidated Industries, Inc. 11770 Berea Road Cleveland Ohio 44111(US)

2 Inventor: Ferrari, Marco
516 East University Street
Bloomington Illinois 61701(US)
Inventor: Fowler, Michael R.
1009 Porter Lane
Normal Illinois 61761(US)
Inventor: McVey, Kelly
107 Meadowbrook Drive
Bloomington, Illinois 61701(US)

Representative: Herrmann-Trentepohl,
Werner, Dipl.-Ing. et al
Herrmann-Trentepohl, Kirschner, Grosse,
Bockhorni & Partner Forstenrieder Allee 59
W-8000 München 71(DE)

54 Stick type vacuum cleaner.

© A light-weight upright vacuum cleaner having a porous filter bag and a re-usable dirt cup in which the handle has two positions for either upright usage, or substantially horizontal usage on stairs, or the like. The cleaner is further provided with a rigid support bar connection the handle to the base of the vacuum cleaner and which is located outside the porous bag and the dirt cup in order to provide an unimpeded flow of air through the porous bag and of dirt into a larger volume dirt cup.

EUROPEAN SEARCH REPORT

DOCUMENTS CONSIDERED TO BE RELEVANT			Γ	EP 91102452.9	
Category	Citation of document with indic of relevant passa		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)	
x	DE - A - 3 430 (PROGRESS-ELEKT MAUZ & PFEIFFER * Fig. 1,4,6	ROGERĀTE GES. m.b.H.)	1,2,7, 8,15, 21	A 47 L 5/28	
A	EP - A - 0 286 (BLACK-DECKER) * Fig. 2,3 *	203	3,4,5		
A	US - A - 4 621 (HAMPTON) * Fig. 3 *	<u>390</u> 	3		
				TECHNICAL FIELDS SEARCHED (Int. Cl.5)	
				A 47 L 5/00 A 47 L 7/00 A 47 L 9/00	
,					
The present search report has been drawn up for all claims					
Place of search Date of completion of the search		Examiner			
VIENNA 01-0		01-04-1992	BENCZE		
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		E : earlier patent dot after the filing do D : document cited if L : document cited fo	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		