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(72) Inventor: **Claesson, Knut**
563 94 Gränna (SE)

(74) Representative: **Wennborg, Göte et al**
Kransell & Wennborg AB
Box 27834
115 93 Stockholm (SE)

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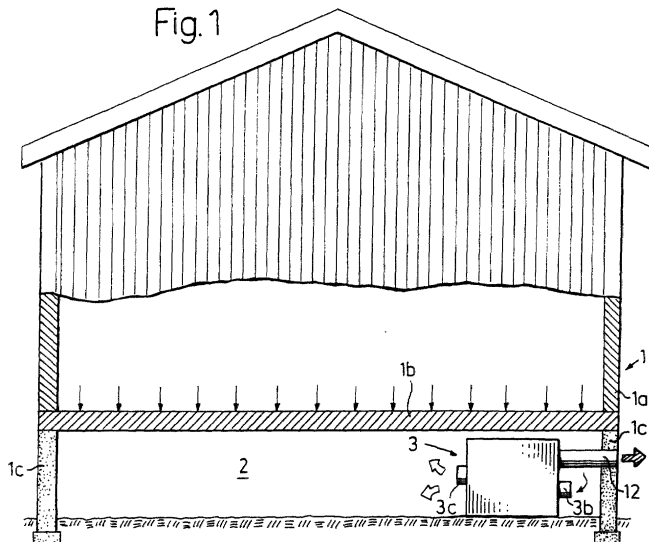
(71) Applicant: **Corroventa Avfuktning AB**
564 24 Bankeryd (SE)

(54) **A method and a device to reduce or avoid formation and smell of mildew in a building**

(57) In a method of reducing or avoiding the formation of mildew and its associated malodours in a building that includes a floor over crawl space structure and that rests on a foundation (1c) a rotor-equipped dehumidifier is provided in the crawl space situated beneath the floor structure and delimited by the foundations. A subpressure is maintained in the crawl space, so that air will be drawn from the building interior and through the floor structure and into said space by suction. This is achieved by leading part of the process air delivered to

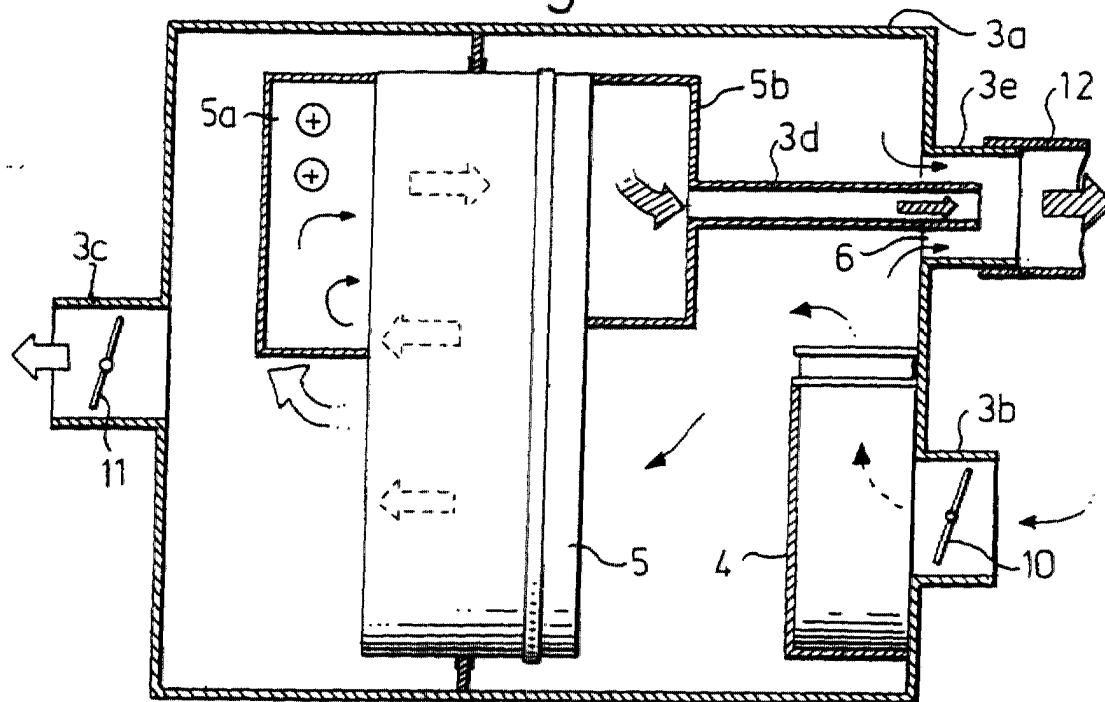
the dehumidifier away from the dehumidifier and out from said space, after said air has been pressurized by the fan (4) of the dehumidifier and prior to dehumidifying said air. This enables the pressurized process air to be led away through conduit means (3e, 12) that extends at least initially in connection with the moist air exhaust conduit (3d) of the dehumidifier (3). The inventive method obviates the need for a separate fan to sustain a subpressure in said space. The invention also relates to a device that operates in accordance with the inventive method.

Fig.1



EP 1 058 064 A3

Fig. 2





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EUROPEAN SEARCH REPORT

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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.7)
A	US 5 752 323 A (ABUKAWA NORIO ET AL) 19 May 1998 (1998-05-19) * abstract * * column 4, line 55 - line 65 * * column 7, line 47 - line 55 * * figures 5,11 * ---	1,3,5,7	F24F3/14
A	US 5 147 420 A (CLAEISSON KNUT) 15 September 1992 (1992-09-15) * abstract * * figures 1,2 * ---	1,5	
A	WO 96 11049 A (CORROVENTA AVFUKTNING AB) 18 April 1996 (1996-04-18) ---		
A	EP 0 693 660 A (SANYO ELECTRIC CO) 24 January 1996 (1996-01-24) ---		
A	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 10, 31 October 1997 (1997-10-31) -& JP 09 155143 A (MITSUBISHI ELECTRIC CORP), 17 June 1997 (1997-06-17) * abstract * * figure 12 * * figures 3,4,18 * ---		TECHNICAL FIELDS SEARCHED (Int.Cl.7) F24F E04B
A	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 09, 30 July 1999 (1999-07-30) -& JP 11 094298 A (DAIKIN IND LTD), 9 April 1999 (1999-04-09) * abstract * * figure 1 * --- -/--		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 6 September 2001	Examiner De Graaf, J.D.
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	

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Application Number
EP 00 85 0096

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.7)
A	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 02, 31 March 1995 (1995-03-31) -& JP 06 313632 A (O M KENKYUSHO:KK), 8 November 1994 (1994-11-08) * abstract * -----		
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 6 September 2001	Examiner De Graaf, J.D.
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			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 85 0096

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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06-09-2001

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5752323	A	19-05-1998	JP 3152609 B2	03-04-2001
			JP 9229416 A	05-09-1997
US 5147420	A	15-09-1992	SE 462583 B	23-07-1990
			AT 97339 T	15-12-1993
			DE 68910835 D1	23-12-1993
			DE 68910835 T2	05-05-1994
			EP 0445175 A1	11-09-1991
			JP 2942932 B2	30-08-1999
			JP 4501973 T	09-04-1992
			SE 8804281 A	25-11-1988
			WO 9006165 A1	14-06-1990
WO 9611049	A	18-04-1996	SE 502516 C2	06-11-1995
			EP 0785819 A1	30-07-1997
			SE 9403431 A	06-11-1995
			WO 9611049 A1	18-04-1996
EP 0693660	A	24-01-1996	JP 3148528 B2	19-03-2001
			JP 8035696 A	06-02-1996
			JP 8145562 A	07-06-1996
			CA 2150203 A1	23-01-1996
			CN 1129305 A	21-08-1996
			EP 0693660 A2	24-01-1996
			SG 30389 A1	01-06-1996
			US 5572799 A	12-11-1996
JP 09155143	A	17-06-1997	NONE	
JP 11094298	A	09-04-1999	NONE	
JP 06313632	A	08-11-1994	JP 2524299 B2	14-08-1996