

(19)



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11) Publication number:

**0 501 073 A3**

(12)

**EUROPEAN PATENT APPLICATION**(21) Application number: **91311768.5**(51) Int. Cl.<sup>5</sup>: **F24F 13/14**(22) Date of filing: **18.12.91**(30) Priority: **28.02.91 CA 2037356**(43) Date of publication of application:  
**02.09.92 Bulletin 92/36**(84) Designated Contracting States:  
**DE FR GB IT**(88) Date of deferred publication of the search report:  
**27.01.93 Bulletin 93/04**(71) Applicant: **Datta, Dipti**  
**1023 McBride Avenue**  
**Mississauga, Ontario L5C 1M3(CA)**(72) Inventor: **Datta, Dipti**  
**1023 McBride Avenue**  
**Mississauga, Ontario, L5C 1M3(CA)**  
Inventor: **Yazici, Muammer**  
**195, Berry Road**  
**Etobicoke, Ontario, M8Y 1X2(CA)**(74) Representative: **Adkins, Michael**  
**Withers & Rogers 4 Dyer's Buildings Holborn**  
**London EC1N 2JT(GB)**(54) **Air damper apparatus.**

(57) A damper (10) for controlling air flow through an air duct (12) is provided. The damper (10) includes a mounting frame (34) secured to the interior of the duct (12) which has a circular opening (21) for air flow therethrough when the damper (10) is open. A circular damper plate (28) is provided which is dimensioned to block the circular opening (21) in the closed position. The plate (28) can be moved and rotated to a fully open position. The plate is rotated by an actuator (36) and movement of the damper plate (28) is controlled by a coupling mechanism (32). This mechanism (32) can have a pair of spaced guide plates (46,48) each of which is provided with two arcuate, diverging guide slots (52,54). Corresponding guide slots in the two plates (46,48) are aligned. A support bracket (68) for the damper plate (28) has two guide pins (76,78) which extend through the aligned slots and are movable therein.

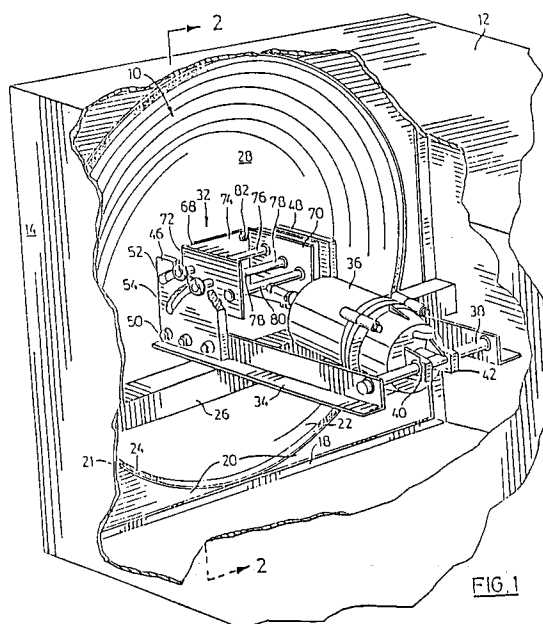


FIG. 1

**EP 0 501 073 A3**



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number

EP 91 31 1768

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)
D,A	US-A-4 605 198 (GREINER) * abstract; figure 1 * ---	1,6	F24F13/14
A	FR-A-1 199 122 (JULIEN) -----		
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			F24F F16K
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 09 NOVEMBER 1992	Examiner PESCHEL G.
<b>CATEGORY OF CITED DOCUMENTS</b> 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			