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(72) Inventor: **Del Fabbro, Claudio**  
**33080 Porcia, Pordenone (IT)**

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(74) Representative: **Agostini, Agostino et al**  
**PROPRIA, Protezione Proprietà Industriale srl,**  
**Via Mazzini 13**  
**33170 Pordenone (IT)**

(71) Applicant: **IRCA S.p.A.**  
**I-31020 S. Vendemiano, Treviso (IT)**

**(54) Fan-heater unit**

(57) The invention refers to a so-called fan-heater unit, adapted to be included in an apparatus such as a fan-assisted or forced-convection food cooking oven for catering or commercial applications. The unit comprises at least a tangential-type fan (32) mounted with its shaft extending vertically and supported at both its ends by rolling-type journal bearings (44, 46). An electric motor (38), a driving belt (35), driving and driven pulleys (39 and 37, resp.) are used to drive the fan.

The main feature of the invention is that the journal

bearings (44, 46) are housed in the walls of channels (53, 61), through which a flow of cooling air taken in from the outside ambient is caused to pass. In a preferred manner, the same walls (53, 61) are also the walls of other channels (57, 65) through which cooling air taken in from the outside ambient is caused to flow as well. Even the driving belt (35) and the pulleys (37, 39) are preferably immersed in the flow of cooling air. Advantages: Possibility for moving parts, in particular standard-type rolling journal bearings to be used, without this impairing reliability to any extent.

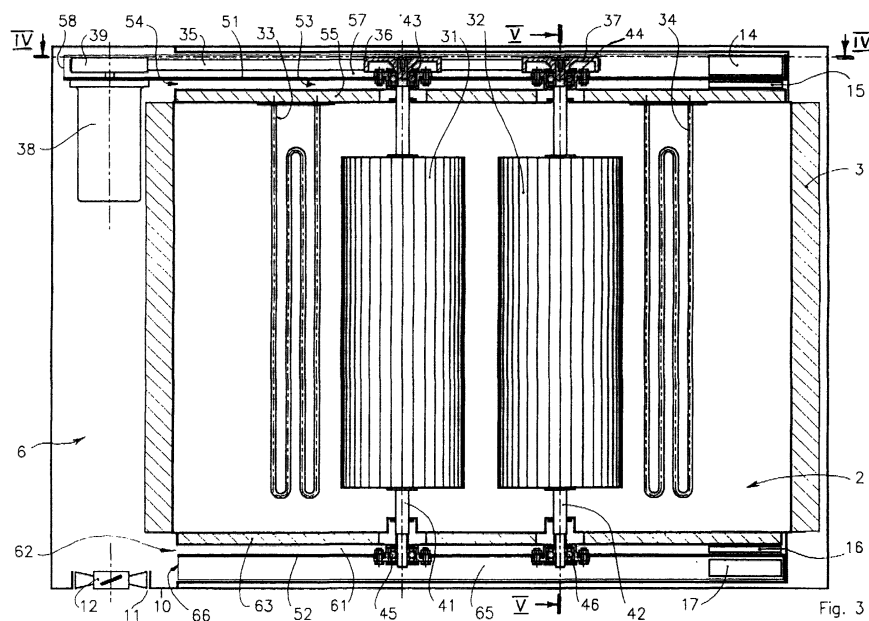


Fig. 3

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# EUROPEAN SEARCH REPORT

Application Number  
EP 97 10 2626

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Place of search <b>THE HAGUE</b>		Date of completion of the search <b>5 December 2001</b>	Examiner <b>Vanheusden, J</b>
<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			

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