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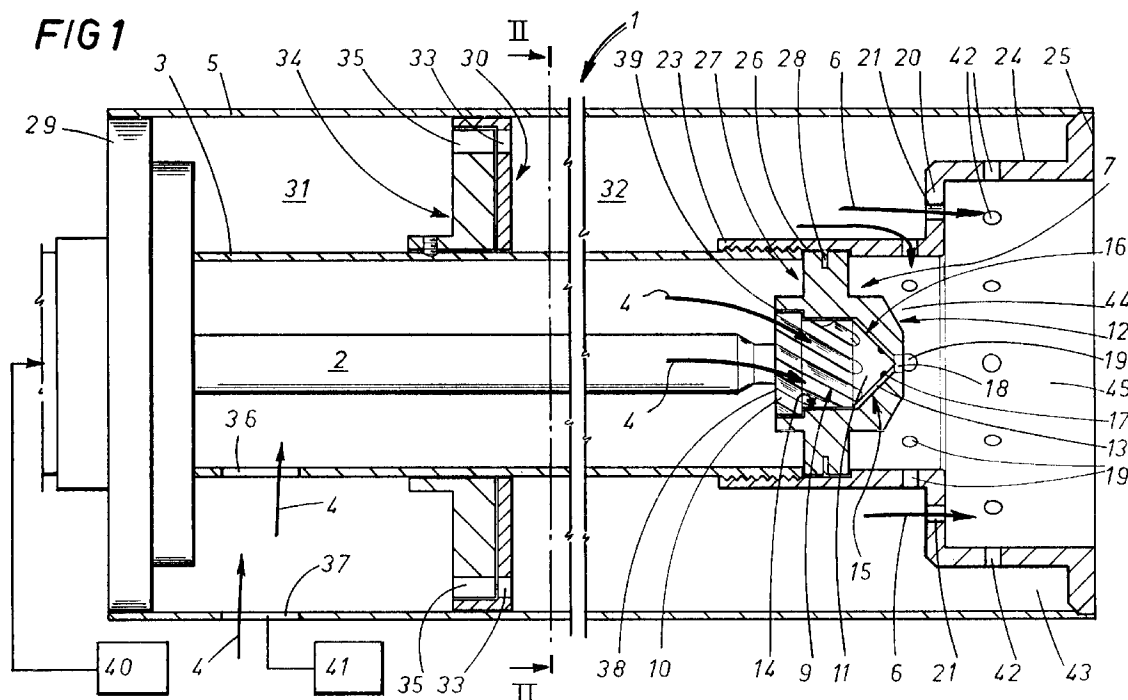
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(54) Air-atomized oil burner

(57) The air-atomized oil burner comprises three co-axial tubes (2, 3, 5), the innermost one (2) being designed to feed fuel oil, while the middle one (3) and outermost one (5) are fed by the same air supply at low pressure and ambient temperature, and comprises also an atomizing nozzle (7) consisting of a head (8) fitted to the innermost tube (2) and having peripheral grooves (10) extending at an angle with respect to the axis of the head (8) and terminating at a conical section (11) of the

head (8) itself, and of a casing (12) which closes the said middle tube (3) and which has an axial hole (13) for housing the said head (8); in the axial hole (13) the head (8) defines a small sized atomization chamber (16) into which the grooves (10) and the fuel oil feed holes (17) lead in perpendicular directions; the atomization chamber (16) feeds the atomized oil along the middle tube (3) where it is mixed with secondary air (6) fed through radial holes (19) made in the middle tube (3) itself.



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EUROPEAN SEARCH REPORT

Application Number

EP 95 83 0449

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.6)
A	US 4 221 558 A (SANTISI HARRY C) * the whole document *	1	F23D11/10

A	EP 0 140 477 A (PARKER HANNIFIN CORP) * the whole document *	1	

			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			F23D
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		11 December 1997	Coli, E
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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