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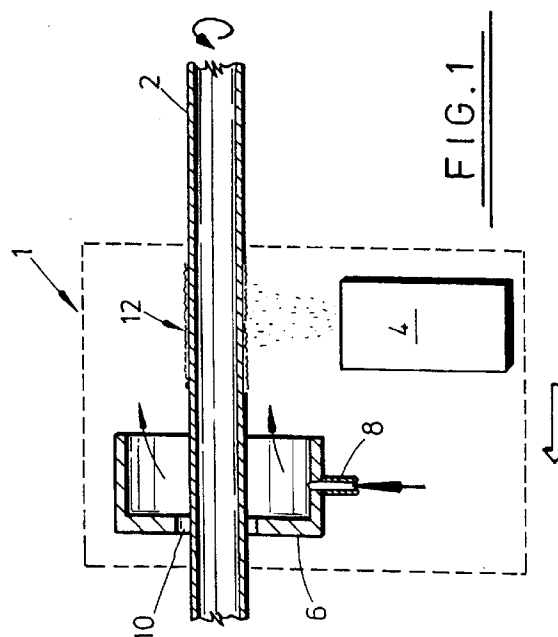
(71) Applicant : **Star Refrigeration Ltd.**
Thornliebank Industrial Estate
Glasgow G46 8JW, Scotland (GB)

(72) Inventor : **Pearson, Stephen Forbes**
9/2 Whistlefield Court
Bearsden, Glasgow G61 1PZ (GB)

(74) Representative : **Horner, Martin Grenville et al**
Cruikshank & Fairweather
19 Royal Exchange Square
Glasgow G1 3AE Scotland (GB)

(54) Production of heat transfer element.

(57) A heat transfer element (2) for use in boiling a liquid is produced by spraying a substrate, such as a heat exchanger tube, with a plasma of liquified metal particles and concurrently spraying the substrate with liquid carbon dioxide to provide a cooling effect. Preferably the metal particle spray (4) and the carbon dioxide spray (8) are spaced apart, and there is relative movement between the sprays and the substrate, such that a given area of the substrate is pre-cooled by the cold carbon dioxide just prior to liquified metal particles impinging thereon. A shroud (6) may assist in directing the liquid carbon dioxide first onto the substrate, then into the spray of liquified metal particles.





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 94 30 1175

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,Y	EP-A-0 017 944 (UNION CARBIDE CORPORATION) * page 7, paragraph 1 - page 12, last paragraph *	1,2,5-11	C23C4/12 C23C4/08 F28F13/18
Y	EP-A-0 375 914 (URANIT GMBH) * the whole document *	1,2,5-11	
A	DE-A-26 15 022 (AGEFKO KOHLENSÄURE-INDUSTRIE GMBH) * column 2, line 22 - column 4, line 30; figures *	1-3,10, 11	
A	EP-A-0 263 469 (LINDE AKTIENGESELLSCHAFT) * claims 1-4; figure 1 *	1,10	
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
			F28F C23C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 24 February 1995	Examiner Eccetto, M
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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