

Title (en)  
Production of heat transfer element.

Title (de)  
Herstellung eines Wärmeübertragungselements.

Title (fr)  
Fabrication d'un élément de transfert de chaleur.

Publication  
**EP 0612858 A3 19950419 (EN)**

Application  
**EP 94301175 A 19940218**

Priority  
GB 9303655 A 19930223

Abstract (en)  
[origin: EP0612858A2] 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 precooled 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. <IMAGE>

IPC 1-7  
**C23C 4/12**; **C23C 4/08**; **F28F 13/18**

IPC 8 full level  
**C23C 4/12** (2006.01); **F28F 13/18** (2006.01)

CPC (source: EP)  
**C23C 4/12** (2013.01); **F28F 13/187** (2013.01)

Citation (search report)  
• [DY] EP 0017944 A1 19801029 - UNION CARBIDE CORP [US]  
• [Y] EP 0375914 A1 19900704 - URANIT GMBH [DE], et al  
• [A] DE 2615022 B1 19770721 - AGEFKO KOHLENSAEURE IND  
• [A] EP 0263469 A1 19880413 - LINDE AG [DE]

Cited by  
US6303191B1; WO9833031A1

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 0612858 A2 19940831**; **EP 0612858 A3 19950419**; **EP 0612858 B1 19990609**; DE 612858 T1 19950420; DE 69418915 D1 19990715; DE 69418915 T2 20000127; GB 9303655 D0 19930407

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