

Title (en)

Water-film-cooled modular nozzle especially for high-temperature tests of specimens or the like.

Title (de)

Durch Wasserfilm gekühlte Modulardüse, insbesondere für Hochtemperaturtests von Proben oder ähnlichem.

Title (fr)

Tuyère modulaire à refroidissement par film d'eau notamment pour essais à haute température d'éprouvettes ou analogues.

Publication

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Application

**EP 92450007 A 19920603**

Priority

FR 9107188 A 19910607

Abstract (en)

[origin: EP0517638A1] - The invention relates to a water-film-cooled modular nozzle especially for high-temperature tests of specimens or the like, comprising a divergent portion (3) of relatively great length compared with the diameter of the throat (2), characterised in that it consists of a metal segment (TAM) containing the convergent portion (1), the throat (2) and the start of the divergent portion (3) and of one or more divergent segments (TIM, TIV, TAV), likewise metal, the various segments being assembled end-to-end, and in that the external wall of each segment is cooled independently by a thin film of water, the assembly of the segments and of the separators being enclosed in a fixed external envelope (EAM, EIM, EIV, EAV) defining, square with each segment, an independent water circulation chamber (29 to 32) containing the separator, the arrangement being such that a clearance along the longitudinal axis of the said assembly as regards the said envelope is allowed for with a view to taking up the thermal expansion of the nozzle. <??>- Application in particular to plasma nozzles. <IMAGE>

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