

Title (en)
PROCESS FOR MANUFACTURING SPINNERET PLATES

Publication
EP 0209651 B1 19910814 (DE)

Application
EP 86105992 A 19860430

Priority
DE 3524411 A 19850709

Abstract (en)
[origin: US4694548A] The present invention relates to a method for producing spinning nozzle plates having funnel-shaped preliminary channels in flow communication with nozzle capillaries. Two embodiments of the method are provided which use photolithographic and electrodeposition techniques. Common to both embodiments of the method is the use of a metal plate provided with funnel-shaped preliminary channels as a self-aligning irradiation mask for irradiating a photoresist layer provided on the metal plate. Nozzle capillaries subsequently defined either in an electrodeposited layer according to a first embodiment of the invention or in electrodeposited tubular projections according to a second embodiment of the invention, have an offset-free, continuous transition between themselves and the preliminary channels. Photolithographic and electrodeposition techniques may also be used to define the funnel-shaped preliminary channels in the metal plates.

IPC 1-7
C25D 1/02; G03F 7/12

IPC 8 full level
D01D 4/02 (2006.01); **B23P 15/16** (2006.01); **C25D 1/02** (2006.01); **C25D 1/08** (2006.01); **C25D 7/00** (2006.01); **G03F 7/12** (2006.01)

CPC (source: EP US)
C25D 1/08 (2013.01 - EP US); **Y10T 29/49432** (2015.01 - EP US)

Cited by
CN111702323A

Designated contracting state (EPC)
AT CH DE FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0209651 A2 19870128; EP 0209651 A3 19880914; EP 0209651 B1 19910814; AT E66254 T1 19910815; AU 585624 B2 19890622; AU 5988886 A 19870115; BR 8603196 A 19870224; CA 1258572 A 19890822; DE 3524411 A1 19870115; DE 3524411 C2 19890503; DE 3680837 D1 19910919; JP H0747249 B2 19950524; JP S6244322 A 19870226; US 4694548 A 19870922

DOCDB simple family (application)
EP 86105992 A 19860430; AT 86105992 T 19860430; AU 5988886 A 19860709; BR 8603196 A 19860708; CA 513271 A 19860708; DE 3524411 A 19850709; DE 3680837 T 19860430; JP 15889886 A 19860708; US 88363386 A 19860709