

Title (en)

PROCESS AND APPARATUS FOR THE PRODUCTION OF HEAT EXCHANGERS FROM CERAMIC FOILS

Publication

EP 0074471 A3 19830622 (DE)

Application

EP 82105905 A 19820702

Priority

DE 3136253 A 19810912

Abstract (en)

[origin: US4526635A] Process and apparatus for manufacturing heat exchangers from ceramic sheets, wherein different flow channels are stamped from or pressed into the sheets, and the formed sheets are joined together with a laminating agent. The stacking of the individual sheets is effected using apparatus in which the sheets are transported to the forming means, applicator means and laminating means by horizontally and vertically displaceable, rotatable and pivotable suction plates. The organic component of the ceramic sheets is expelled from the heat exchanger block obtained in two heating steps with an intermediate forming operation to bring the heat exchanger block to its final dimensions, and the block then fired between 1,200 DEG to 1,700 DEG C. The actual sintering temperature depends on the particular ceramic used, which may comprise Si₃N₄, SiC, cordierite and/or semiconductive barium titanate compounds.

IPC 1-7

F28F 21/04

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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EP 0074471 A2 19830323; **EP 0074471 A3 19830622**; **EP 0074471 B1 19850206**; AT E11698 T1 19850215; DE 3136253 A1 19830331; DE 3262215 D1 19850321; JP H0219400 B2 19900501; JP S5860195 A 19830409; US 4526635 A 19850702

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