

Title (en)  
SLOTTED TUBE WITH REVERSIBLE USAGE FOR HEAT EXCHANGERS

Title (de)  
GESCHLITZTES ROHR ZUR UMSCHALTbaren VERWENDUNG EINES WÄRMETAUSCHERS

Title (fr)  
TUBES RAINURES A UTILISATION REVERSIBLE POUR ECHANGEURS THERMIQUES

Publication  
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Application  
**EP 03743918 A 20030310**

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Abstract (en)  
[origin: WO03076861A1] The invention relates to metallic slotted tubes (1) having an outer diameter De. The inventive tubes are slotted internally by N helical ribs (2) having an apex angle alpha, height H, base width LN and helix angle beta, said consecutive ribs being separated by means of a slot (3) comprising a flat base of width LR, with a pitch P which is equal to LR + LN. Said tubes are characterised in that: a) De is between 4 and 20 mm, b) the number N of ribs is between 46 and 98, c) the height H of said ribs is between 0.18 mm and 0.4 mm, d) the apex angle alpha is such that  $15^\circ \leq \alpha < 30^\circ$ , and e) the helix angle beta is between  $18^\circ$  and  $35^\circ$ . Said tubes can be used to obtain simultaneously a high heat exchange coefficient in evaporation and condensation and a low pressure drop.

IPC 8 full level  
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