

Title (en)  
Turbulence inducing members.

Title (de)  
Vorrichtungen zur Turbulenzerzeugung.

Title (fr)  
Dispositifs introduisant une turbulence.

Publication  
**EP 0077130 A1 19830420 (EN)**

Application  
**EP 82304794 A 19820910**

Priority  
JP 15193481 U 19811013

Abstract (en)  
A plastics turbulence inducing member 20 comprises a shaft portion 22 and a pair of helical ribs 24, 26 extending radially from the shaft portion. The rib 24 has a greater radial extent than the rib 26 and forms a close fit with a pipe 30 for a fluid in an air conditioning system for example, while the rib 26 stops short of the wall of the pipe. The member 20 is thus held firmly in position and increased turbulence is induced, thereby enhancing the heat exchange efficiency.

IPC 1-7  
**F15D 1/06**; **F28F 13/12**; **B01F 5/06**

IPC 8 full level  
**F28F 21/06** (2006.01); **B01F 5/06** (2006.01); **F15D 1/06** (2006.01); **F28F 1/40** (2006.01); **F28F 13/12** (2006.01)

CPC (source: EP)  
**B01F 25/4314** (2022.01); **F15D 1/065** (2013.01); **F28F 13/12** (2013.01)

Citation (search report)  
• [A] FR 1425901 A 19660124 - BROWN FINTURE COMPANY  
• [A] GB 1027933 A 19660427 - ENGLISH ELECTRIC CO LTD  
• [A] DE 2104219 A1 19720810 - ZIMMER AG PLANUNG U BAU VON IN  
• [AD] FR 2404511 A1 19790427 - SOGEX [FR]

Cited by  
US7331989B2; EP1589273A1; CN111589279A; EP1589274A1; CN107024129A; EP2114828A4; CN107676301A; CN102670337A; CN103203193A; EP1314406A3; EP0257220A1; US2014191057A1; US9795976B2; DE10206250A1; DE10206250B4; US2018099444A1; US10688703B2; US7185677B2; US8021415B2; WO03045279A1; WO03045280A1; EP2941319B1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 0077130 A1 19830420**; JP S5858280 U 19830420; JP S5923985 Y2 19840716

DOCDB simple family (application)  
**EP 82304794 A 19820910**; JP 15193481 U 19811013