

Title (en)

Mixing element for a flange junction in a pipe

Title (de)

Mischelement für einen Flanschübergang in einer Rohrleitung

Title (fr)

Elément de mélange pour une jonction à flasques dans un tuyau

Publication

EP 1153650 B1 20050720 (DE)

Application

EP 01810359 A 20010410

Priority

- EP 01810359 A 20010410
- EP 00810390 A 20000508

Abstract (en)

[origin: US2001038575A1] The mixing element (2) is provided for a flange transition (10) in a pipeline (1) and can be mounted between two flanges (11, 12) of the pipeline. It comprises a mixing-active structure (25) which is formed by one or two vanes (25a, 25b) within a ring (20). Two mutually inclined planes (21, 22) can be defined, with the one vane being arranged on the one plane or the two vanes being arranged on the two planes. The two planes intersect at a crossing axis (23). Closed sub-surfaces (52, 51') as well as open pieces of surface (51, 520, 521, 522) of the vanes form a surface pattern (5) which is formed asymmetrically with respect to the crossing axis. Through the asymmetric shape a fluid (9) which flows through the pipeline can be deflected in such a manner that partial flows (9b) are deflected from one pipe half through sub-surfaces of the one plane (21) into the other pipe half and encounter there largely non deflected partial flows, with this also holding vice versa with respect to the other plane (22) if on the latter there is a second vane (25b) having structure elements.

IPC 1-7

B01F 5/06; B01F 5/04

IPC 8 full level

B01F 23/00 (2022.01)

CPC (source: EP US)

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Cited by

EP1302236A1; CN1325150C; CN104884393A; US6811302B2; US10232328B2; TWI491435B

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