

Title (en)

Mixer tube for a turbofan engine

Title (de)

Mischrohr eines Zweikreis-Strahltriebwerks

Title (fr)

Tube mélangeur pour turboréacteur à double flux

Publication

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Application

EP 02769890 A 20020829

Priority

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- DE 10145489 A 20010914

Abstract (en)

[origin: WO03025378A2] The invention relates to a device for mixing two flows of fluid (16, 18), which are initially guided separate from one another, in a two-circuit reaction engine. To this end, a mixing tube (10) is provided which encircles a hot central stream (16), and a cold bypass flow (18) flows along the outer shaped lateral surface (12) of said mixing tube. The mixing tube (10) is provided in the form of a truncated cone that narrows in the direction of flow (S) and has openings (20) at the downstream end in the peripheral direction of the mixing tube surface (12). Said openings are located in a cross-sectional plane that is perpendicular to the longitudinal axis (14) of the mixing tube (10), and the hot central stream (16) flowing through the mixing tube (10) penetrates, via the openings, the cold bypass stream (18) flowing around the mixing tube surface (12). The openings (20) have elliptical passage surfaces (22) with a major axis (24) and a minor axis (26), whereby the major axis (24) of the passage surfaces (22) on the lateral surface (12) of the mixing tube (10) run in the direction of flow (S) of the fluids (16, 18), and the minor axis (26) runs perpendicular thereto.

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F02K 1/40

IPC 8 full level

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DOCDB simple family (publication)

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