

Title (en)
SWIRLER ARRANGEMENT OF A BURNER

Title (de)
WIRBLERANORDNUNG EINES BRENNERS

Title (fr)
AGENCEMENT TOURBILLONNAIRE D'UN BRÛLEUR

Publication
EP 3564585 A1 20191106 (EN)

Application
EP 18170798 A 20180504

Priority
EP 18170798 A 20180504

Abstract (en)
The present invention relates to a swirler arrangement (10; 10a) of a burner (52), in particular of a gas turbine engine (14), comprising at least two wings (16, 18; 16a, 18a), wherein a thread-like flow channel (20) is arranged between the at least two wings (16, 18; 16a, 18a), wherein the flow channel (20) is allowing a flow medium (22) to travel along the flow channel (20) in a flow direction (24, 24') and wherein the flow medium (22) is set into a thread-like motion by the flow channel (20) when flowing through the flow channel (20) and wherein each wing (16, 18; 16a, 18a) of the at least two wings (16, 18; 16a, 18a) comprise an upstream part (26) and a downstream part (28; 28a). To increase the flashback resistance of the burner (52) it is proposed that the downstream part (28; 28a) comprises at least one opening (30; 30a) for injecting fuel (32) into the flow medium (22) while traveling the flow channel (20).

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F23C 7/004 (2013.01); **F23R 3/12** (2013.01); **F23R 3/14** (2013.01); **F23R 3/26** (2013.01)

Citation (search report)
• [XY] EP 3062019 A1 20160831 - GEN ELECTRIC TECHNOLOGY GMBH [CH]
• [XY] EP 2685164 A1 20140115 - ALSTOM TECHNOLOGY LTD [CH]
• [XA] EP 3236157 A1 20171025 - SIEMENS AG [DE]
• [XA] EP 1921376 A1 20080514 - SIEMENS AG [DE]

Cited by
WO2023131386A1

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