

Title (en)
BORESCOPE FOR OPTICALLY INSPECTING GAS TURBINES

Title (de)
BOROSKOP ZUR OPTISCHEN INSPEKTION VON GASTURBINEN

Title (fr)
BOROSCOPE POUR L'INSPECTION OPTIQUE DE TURBINES À GAZ

Publication
EP 3911943 A1 20211124 (DE)

Application
EP 20702735 A 20200114

Priority

- DE 102019100821 A 20190114
- EP 2020000008 W 20200114

Abstract (en)
[origin: CA3124778A1] The invention relates to a borescope (10, 11) for optically inspecting gas turbines, in particular aircraft engines (1). The borescope (10, 11) comprises an electronic image capturing unit (12) as a borescope objective lens at the end of a shaft (13) which is suitable for insertion into a borescope opening and suitable for exact positioning of the borescope objective lens relative to the borescope opening, data and supply lines (15) for the image capturing unit (12) being guided through said shaft. The image capturing unit (12) has two spaced apart image capturing sensors (18), the recording cones (18") of which overlap in a predefined recording plane (22) to form a recording region (23) in such a way that the image data from the two image capturing sensors (18) can be processed into 3D data by triangulation.

IPC 8 full level
G01N 21/95 (2006.01); **G01N 21/954** (2006.01)

CPC (source: EP US)
F01D 21/003 (2013.01 - US); **F02C 7/00** (2013.01 - EP); **G01M 11/081** (2013.01 - EP); **G01M 15/14** (2013.01 - EP US); **G01N 21/9515** (2013.01 - EP); **G01N 21/954** (2013.01 - EP US); **G02B 23/2423** (2013.01 - EP); **G02B 23/2484** (2013.01 - EP); **G02B 23/2492** (2013.01 - EP US); **G03B 35/08** (2013.01 - EP); **F05D 2220/323** (2013.01 - US); **F05D 2260/80** (2013.01 - EP US); **F05D 2260/83** (2013.01 - EP US); **G01N 2021/9544** (2013.01 - EP US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102019100821 A1 20200716; CA 3124778 A1 20200723; CN 113302479 A 20210824; EP 3911943 A1 20211124; JP 2022518185 A 20220314; US 11940351 B2 20240326; US 2022082473 A1 20220317; WO 2020148084 A1 20200723

DOCDB simple family (application)
DE 102019100821 A 20190114; CA 3124778 A 20200114; CN 202080009107 A 20200114; EP 2020000008 W 20200114; EP 20702735 A 20200114; JP 2021540291 A 20200114; US 202017422210 A 20200114