Title (en)

PRESSURE ALTERING SURFACE AND A DYNAMIC PRESSURE SENSING APPARATUS

Title (de)

DRUCKÄNDERNDE OBERFLÄCHE UND DYNAMISCHE DRUCKMESSVORRICHTUNG

Title (fr)

SURFACE DE MODIFICATION DE PRESSION ET APPAREIL DE DÉTECTION DE PRESSION DYNAMIQUE

Publication

EP 4085259 A1 20221109 (EN)

Application

EP 20828084 A 20201211

Priority

- GB 201918394 A 20191213
- GB 2020053178 W 20201211

Abstract (en)

[origin: GB2589920A] A pressure altering surface for use in an airspeed measurement system of an aircraft comprises a fluid engaging exterior surface 13 substantially domed in profile and configured to induce a pressure drop in the vicinity of the apex of the dome. The pressure drop may be a function of incident airflow travelling transverse to the dome. The apex of the dome may comprise an aperture 15a connected by a conduit 16 to a pressure sensor 17 which may measure the total pressure (e.g. static pressure + dynamic pressure) at the domed portion 13. The conduit 16 and pressure sensor 17 may be enclosed within a housing 18. The domed portion 13 may comprise heating means 21. The surface may comprise a static port 40 and associated static pressure sensor 41 both spaced apart from the domed portion 13. Also provided is an airspeed measurement system comprising the pressure altering surface and an air data processor. Also provided is a method of calculating an aircraft's airspeed using the pressure altering surface.

IPC 8 full level

G01P 5/14 (2006.01); **B64D 43/02** (2006.01); **G01P 13/02** (2006.01)

CPC (source: EP GB)

G01L 13/00 (2013.01 - GB); **G01P 1/02** (2013.01 - GB); **G01P 5/14** (2013.01 - EP GB); **G01P 13/025** (2013.01 - GB); B64D 43/02 (2013.01 - EP); G01P 13/025 (2013.01 - EP)

Citation (search report)

See references of WO 2021116694A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

GB 201918394 D0 20200129; **GB 2589920 A 20210616**; EP 4085259 A1 20221109; WO 2021116694 A1 20210617

DOCDB simple family (application)

GB 201918394 A 20191213; EP 20828084 A 20201211; GB 2020053178 W 20201211