

Title (en)

VEHICLE PANE WITH INTEGRATED TEMPERATURE SENSOR

Title (de)

FAHRZEUGSCHEIBE MIT INTEGRIERTEM TEMPERATURSENSOR

Title (fr)

VITRE DE VÉHICULE À CAPTEUR DE TEMPÉRATURE INTÉGRÉ

Publication

**EP 4103922 A1 20221221 (DE)**

Application

**EP 21700778 A 20210120**

Priority

- EP 20156850 A 20200212
- EP 2021051138 W 20210120

Abstract (en)

[origin: WO2021160388A1] The invention relates to a vehicle pane with a temperature sensor, comprising a substrate (1) and a transparent electrically conductive coating (4) on a surface of the substrate (1), wherein - a temperature measuring field (10) is formed in the electrically conductive coating (4), said temperature measuring field being electrically insulated from the surrounding electrically conductive coating (4) by a separating line (11), - a measurement current path (14) running between two electric contact points (12.1, 12.2) is formed from a region of the electrically conductive coating (4) in the temperature measuring field (10), - the electric contact points (12.1, 12.2) can be connected to a voltage source such that an electric current flows through the measurement current path (14), and - the electric contact points (12.1, 12.2) can be connected to an analysis unit which is suitable for measuring the current strength of the electric current, determining the electric resistance of the measurement current path (14) therefrom, and determining the temperature from the electric resistance using calibration data.

IPC 8 full level

**G01K 1/14** (2021.01); **G01K 7/18** (2006.01)

CPC (source: CN EP KR US)

**B32B 3/08** (2013.01 - CN KR); **B32B 17/10036** (2013.01 - CN KR US); **B32B 17/1022** (2013.01 - CN KR US);  
**B32B 17/1055** (2013.01 - CN KR US); **B32B 27/306** (2013.01 - CN KR); **B60J 1/00** (2013.01 - CN KR US); **G01K 1/14** (2013.01 - EP KR US);  
**G01K 7/16** (2013.01 - CN KR US); **G01K 7/183** (2013.01 - EP KR); **B32B 2264/1051** (2020.08 - US); **B32B 2307/202** (2013.01 - US);  
**B32B 2307/302** (2013.01 - US); **B32B 2307/304** (2013.01 - US); **B32B 2307/412** (2013.01 - US); **B32B 2605/006** (2013.01 - US);  
**G01K 2007/163** (2013.01 - US); **G01K 2205/00** (2013.01 - EP KR); **G01K 2217/00** (2013.01 - EP KR)

Citation (search report)

See references of WO 2021160388A1

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)

**WO 2021160388 A1 20210819**; CN 113543970 A 20211022; EP 4103922 A1 20221221; JP 2023513341 A 20230330;  
KR 20220132643 A 20220930; US 2023073820 A1 20230309

DOCDB simple family (application)

**EP 2021051138 W 20210120**; CN 202180000499 A 20210120; EP 21700778 A 20210120; JP 2022548752 A 20210120;  
KR 20227030632 A 20210120; US 202117799212 A 20210120