

Title (en)

HUMAN-MACHINE INTERFACE DEVICE FOR BUILDING SYSTEMS

Title (de)

MENSCH-MASCHINE-SCHNITTSTELLENEINRICHTUNG FÜR GEBÄUDESYSTEME

Title (fr)

DISPOSITIF D'INTERFACE HOMME-MACHINE POUR SYSTÈMES DE CONSTRUCTION

Publication

**EP 4077185 A1 20221026 (DE)**

Application

**EP 20820462 A 20201214**

Priority

- EP 19216497 A 20191216
- EP 2020085997 W 20201214

Abstract (en)

[origin: WO2021122462A1] A human-machine interface device (4) has a housing (28) which can be arranged on a floor or on a wall of a building. The housing (28) is equipped with a communication device (24), a detection device (12), an optical projection module (14), and a controller (6). The communication device (24) transmits and receives data signals via a communication network (10), and the detection device (12) detects data relating to a user (2). The controller (6) is designed to transmit user data detected by the detection device (12) to a control system (8) of a building system (1) by means of the communication device (24) and actuate the optical projection module (14) using path guidance information received by the control system (8). The optical projection module (14) is designed to project path guidance information (18) which relates to the user (2) and is visible to the user (2) on the floor or on a projection surface (22) on the wall.

IPC 8 full level

**B66B 3/00** (2006.01); **G03B 21/20** (2006.01); **G07C 9/27** (2020.01); **G08B 7/06** (2006.01); **G09F 19/18** (2006.01); **G09F 19/22** (2006.01);  
**G09F 27/00** (2006.01); **H04N 9/31** (2006.01)

CPC (source: EP US)

**B66B 3/006** (2013.01 - EP); **G05B 19/042** (2013.01 - US); **G07C 9/27** (2020.01 - EP); **G08B 7/066** (2013.01 - EP); **G09F 19/18** (2013.01 - EP);  
**G09F 27/005** (2013.01 - EP); **H04N 9/3141** (2013.01 - EP); **G05B 2219/25011** (2013.01 - US); **G07C 9/15** (2020.01 - EP);  
**G07C 9/23** (2020.01 - EP); **G07C 9/257** (2020.01 - EP); **G07C 9/29** (2020.01 - EP); **G09F 19/22** (2013.01 - EP)

Citation (search report)

See references of WO 2021122462A1

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 2021122462 A1 20210624**; AU 2020403827 A1 20220630; BR 112022011685 A2 20220906; CA 3164274 A1 20210624;  
CN 114829279 A 20220729; EP 4077185 A1 20221026; MX 2022007406 A 20220713; US 2023038903 A1 20230209

DOCDB simple family (application)

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CN 202080086467 A 20201214; EP 20820462 A 20201214; MX 2022007406 A 20201214; US 202017787489 A 20201214