

Title (en)

METHOD FOR OPTIMISING THE ENERGY EXPENDITURE AND COMFORT OF A BUILDING

Title (de)

VERFAHREN ZUR OPTIMIERUNG DES ENERGIEAUFWANDS UND DES KOMFORTS EINES GEBÄUDES

Title (fr)

PROCÉDÉ POUR L'OPTIMISATION DES DÉPENSES ÉNERGÉTIQUES ET DU CONFORT D'UN BÂTIMENT

Publication

**EP 3759565 A1 20210106 (FR)**

Application

**EP 19704856 A 20190121**

Priority

- FR 1851762 A 20180228
- FR 2019050123 W 20190121

Abstract (en)

[origin: WO2019166710A1] The present invention relates to a method for optimising the energy expenditure and the comfort of a building, including a plurality of comfort systems provided with an on-line consumption sensor (10), a plurality of local environment data sensors (20) associated with an identifier of a zone of said building, and at least one server (30) for collecting and recording said timestamped data remotely transmitted by said consumption sensors and for collecting data external to the building as well as data characterised in that it includes the following steps: - constructing and saving a simplified digital model of the thermal behaviour of said building; - a step of calibrating the simplified digital model calculated during the preceding step; - a step of validating the calibrated digital model calculated during the preceding step by comparing the digital variables obtained by predictive processing of said calibrated model and the digital variables stored by said server over a period of several days; - a step of calculating digital parameters for resource allocation by applying a Pareto optimum calculation applied to said validated calibrated digital model.

IPC 8 full level

**G05D 23/19** (2006.01)

CPC (source: EP US)

**G05B 19/042** (2013.01 - US); **G05D 23/1917** (2013.01 - EP US); **G06F 30/18** (2020.01 - US); **G06N 20/00** (2019.01 - US); **G05B 2219/2614** (2013.01 - US); **G06F 2111/06** (2020.01 - 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)

**FR 3078414 A1 20190830**; **FR 3078414 B1 20211112**; EP 3759565 A1 20210106; US 11994883 B2 20240528; US 2021055750 A1 20210225; WO 2019166710 A1 20190906

DOCDB simple family (application)

**FR 1851762 A 20180228**; EP 19704856 A 20190121; FR 2019050123 W 20190121; US 201916976394 A 20190121