

Title (en)
BUILDING CONTROL SYSTEM WITH PREDICTIVE CONTROL OF CARBON EMISSIONS USING MARGINAL OPERATING EMISSIONS RATE

Title (de)
GEBÄUDESTEUERUNGSSYSTEM MIT PRÄDIKTIVER STEUERUNG VON KOHLENSTOFFEMISSIONEN UNTER VERWENDUNG DER MARGINALEN BETRIEBSEMISSIONSRATE

Title (fr)
SYSTÈME DE COMMANDE DE BÂTIMENT À COMMANDE PRÉDICTIVE D'ÉMISSIONS DE CARBONE À L'AIDE D'UN TAUX D'ÉMISSIONS DE FONCTIONNEMENT MARGINAL

Publication
EP 4348359 A1 20240410 (EN)

Application
EP 22736061 A 20220527

Priority

- US 202163194771 P 20210528
- US 202163220878 P 20210712
- US 202217668791 A 20220210
- US 202217686320 A 20220303
- US 2022031438 W 20220527

Abstract (en)
[origin: WO2022251700A1] A cascaded control system for coordinating and controlling carbon emissions associated with operating building equipment distributed across a plurality of subsystems includes a first controller configured to generate carbon emissions targets for each of a plurality of subsystems using a predictive control process that accounts for an aggregate carbon emissions of the plurality of subsystems predicted to result from the carbon emissions targets. The cascaded control system also includes a plurality of second controllers, each corresponding to one of the plurality of subsystems and configured to generate control decisions for building equipment of the corresponding subsystem that are predicted to cause the building equipment to achieve the carbon emissions targets for the corresponding subsystem; and operate the building equipment of the corresponding subsystem using the control decisions.

IPC 8 full level
G05B 15/02 (2006.01)

CPC (source: EP)
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Citation (search report)
See references of WO 2022251700A1

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BA ME

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KH MA MD TN

DOCDB simple family (publication)
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