Title (en)
LEARNING DEVICE FOR MOBILE CYBER-PHYSICAL SYSTEM

Title (de)
LERNVORRICHTUNG FÜR EIN MOBILES CYBERPHYSIKALISCHES SYSTEM

Title (fr)
DISPOSITIF APPRENANT POUR SYSTÈME CYBER-PHYSIQUE MOBILE

Publication
EP 4248367 A1 20230927 (FR)

Application
EP 21815481 A 20211118

Priority
- FR 2011987 A 20201123
- EP 2021082153 W 20211118

Abstract (en)
[origin: WO2022106545A1] Disclosed is a learning device intended to be embedded in a mobile cyber-physical system (101) provided with actuators (105), the device comprising at least one perception sensor (103) for perceiving the environment (102) outside the system, at least one internal sensor (112) suitable for providing information on the state of the system, a first learning unit (104) configured to render a perception of the environment based on the data acquired by the at least one perception sensor (103), a second learning unit (106) configured to control the actuators (105), a generator (109) for generating simulation scenarios of the system in its environment controlled by the first learning unit (104) and the second learning unit (106), a scenario simulator (107) and a virtualisation platform (111) for simulating the behaviour of a digital twin of the system in the scenarios simulated by the generator and adapting the parameters of the second learning unit (106) in order to control the system in such a way that it adapts to its environment.

IPC 8 full level
G06N 3/08 (2023.01)

CPC (source: EP US)
G06F 30/27 (2020.01 - US); **G06N 3/08** (2013.01 - EP); **G06N 5/02** (2013.01 - US)

Citation (search report)
See references of WO 2022106545A1

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)
FR 3116634 A1 20220527; **FR 3116634 B1 20221209**; EP 4248367 A1 20230927; US 2023401453 A1 20231214; WO 2022106545 A1 20220527

DOCDB simple family (application)
FR 2011987 A 20201123; EP 2021082153 W 20211118; EP 21815481 A 20211118; US 202118037544 A 20211118