

Title (en)
COARSE- GRAINED MULTILAYER FLOW INFORMATION DYNAMICS FOR MULTISCALE MONITORING

Title (de)
GROBKÖRNIGE, MEHRSCICHTIGE STRÖMUNGSINFORMATIONSDYNAMIK FÜR MEHRSKALIGE ÜBERWACHUNG

Title (fr)
DYNAMIQUE D'INFORMATIONS DE FLUX MULTICOUCHE À GROS GRAIN SERVANT À UNE SURVEILLANCE À ÉCHELLES MULTIPLES

Publication
EP 3682304 A4 20210714 (EN)

Application
EP 18855282 A 20180711

Priority

- US 201762557733 P 20170912
- US 2018041714 W 20180711

Abstract (en)
[origin: WO2019055112A1] Described is a system for multiscale monitoring. During operation, the system receives surveillance data of a scene having a plurality of zones. The surveillance data includes an object flow tensor Vindicating a number of objects flowing from one zone to another zone at time t and an object communication tensor C indicating a number of communications sending from one zone to another zone at time t. The system then determines a cluster membership of the plurality of zones. Dependency links between communications and flows are then determined. At least one cluster of one or more zones is designated as a region of interest based on the dependency links, which allows the system to control a device based on the designated region(s) of interest.

IPC 8 full level
G05B 23/02 (2006.01); **G05B 15/02** (2006.01); **G05B 19/042** (2006.01); **G06N 20/00** (2019.01); **G06V 10/426** (2022.01); **G08B 25/00** (2006.01)

CPC (source: EP US)
G05B 15/02 (2013.01 - EP); **G05B 19/0426** (2013.01 - EP US); **G05B 23/0216** (2013.01 - EP); **G06F 18/2323** (2023.01 - EP); **G06N 20/00** (2018.12 - EP); **G06V 10/426** (2022.01 - EP US); **G06V 10/457** (2022.01 - EP US); **Y02P 90/02** (2015.11 - EP)

Citation (search report)

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- [A] RICHARDS MATTHEW G ET AL: "Integrating ISR Data with Open Source Indicators", AIAA SPACE 2016, 9 September 2016 (2016-09-09), XP055800655, Retrieved from the Internet <URL:https://arc.aiaa.org/doi/abs/10.2514/6.2016-5289>
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- See references of WO 2019055112A1

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

DOCDB simple family (publication)
WO 2019055112 A1 20190321; CN 111033411 A 20200417; EP 3682304 A1 20200722; EP 3682304 A4 20210714

DOCDB simple family (application)
US 2018041714 W 20180711; CN 201880052092 A 20180711; EP 18855282 A 20180711