

(51) International Patent Classification:
B61L 15/00 (2006.01) *B61L 27/00* (2006.01)(21) International Application Number:
PCT/IB2020/055631(22) International Filing Date:
17 June 2020 (17.06.2020)

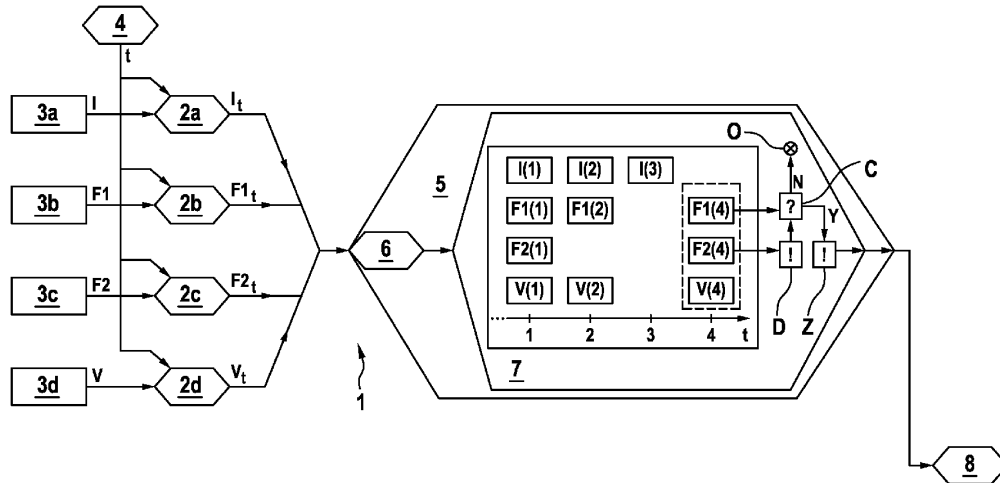
(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
19180725.4 17 June 2019 (17.06.2019) EP(71) Applicant: **MITSUBISHI HEAVY INDUSTRIES, LTD.**
[JP/JP]; 2-3, Marunouchi 3-chome Chiyoda-ku, Tokyo,
100-8332 (JP).(71) Applicant (for ZW only): **MITSUBISHI HEAVY IN-**
DUSTRIES EUROPE LTD. [DE/DE]; Hauptstr. 40,
91054 Erlangen (DE).(72) Inventors: **SUMIYA, Daisuke**; Mitsubishi Heavy Indus-
tries Europe Ltd., Hauptstr. 40, 91054 Erlangen (DE).
HIURA, Ryota; Mitsubishi Heavy Industries Europe
Ltd., Hauptstr. 40, 91054 Erlangen (DE). **DAGNER, Jo-**
hannes; Mitsubishi Heavy Industries Europe Ltd., Hauptstr.
40, 91054 Erlangen (DE). **MAISEL, Sascha**; Mitsubishi
Heavy Industries Europe Ltd., Hauptstr. 40, 91054 Erlangen
(DE).(74) Agent: **HERNANDEZ, Yorck**; Pullacher Str. 23, 82049
Pullach (DE).(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,

(54) Title: SURVEILLANCE SYSTEM FOR AN INFRASTRUCTURE AND/OR A VEHICLE WITH EVENT DETECTION

Fig. 1



(57) **Abstract:** The invention relates to a surveillance system (1) for an infrastructure and/or for a vehicle, comprising at least two sensor modules (2a-2d) configured to collect respective sensor data (I, F1, F2, V) from a respective associated sensor (3a-3d); an analysis module (5) configured to access the sensor data (I, F1, F2, V); wherein the sensor modules (2a-2d) are configured to provide the sensor data (I, F1, F2, V) with a time stamp; and the analysis module (5) is configured to detect a given event based on sensor data (I, F1, F2, V) of at least one first sensor module (2a-2d) and to associate sensor data (I, F1, F2, V) of at least one other second sensor module (2a-2d) with the event based on the time stamps of the sensor data (I, F1, F2, V) to provide an enhanced surveillance and/or maintenance system, in particular a system suitable for large and/or complex infrastructures, vehicles, and combinations thereof.

CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,
DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP,
KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME,
MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ,
OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA,
SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))