



(43) International Publication Date
12 December 2013 (12.12.2013)

(51) International Patent Classification:
G08G 1/087 (2006.01)

(21) International Application Number:
PCT/US2013/042865

(22) International Filing Date:
28 May 2013 (28.05.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
13/487,773 4 June 2012 (04.06.2012) US

(71) Applicant: GLOBAL TRAFFIC TECHNOLOGIES,
LLC [—/US]; 7800 Third Street North, St. Paul, MN
55128 (US).

(72) Inventor: EICHHORST, Kevin, Clare; 845 18th Street
Ne, Owatonna, MN 55060 (US).

(74) Agent: MAUNU, Leroy, D.; Crawford Maunu PLLC,
1150 Northland Drive, Suite 100, St. Paul, MN 55120
(US).

(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, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,

DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LT, 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, SC,
SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, 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).

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a
patent (Rule 4.17(ii))*

Published:

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

(88) Date of publication of the international search report:

13 March 2014

(54) Title: FIELD OF VIEW TRAFFIC SIGNAL PREEMPTION

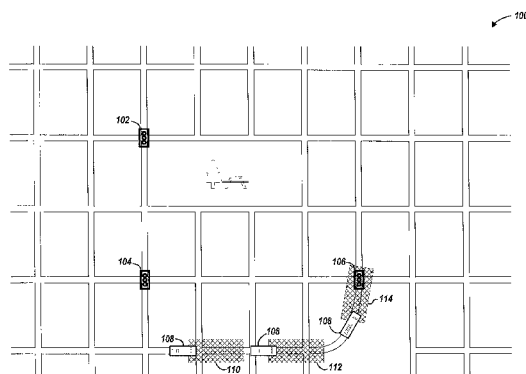


FIG. 1

(57) Abstract: Approaches for issuing preemption requests. The boundaries of a geo- window are repeatedly determined based on locations and headings of a vehicle as the vehicle is traveling along a roadway. The methods and systems determine whether or not any one of a plurality of intersections is located within the boundaries of the geo- window in response to changed boundaries of the geo- window. In response to determining that one of the plurality of intersections is located within the boundaries of the geo- win- dow, a preemption request is transmitted from the vehicle to an intersection controller at the one of the plurality of intersections.