



- (51) **International Patent Classification:**
G08G 1/087 (2006.01)
- (21) **International Application Number:**
PCT/US2015/036574
- (22) **International Filing Date:**
19 June 2015 (19.06.2015)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
14/309,165 19 June 2014 (19.06.2014) US
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- (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, IR, IS, JP, KE, KG, KN, KP, KR, 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, 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, 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,

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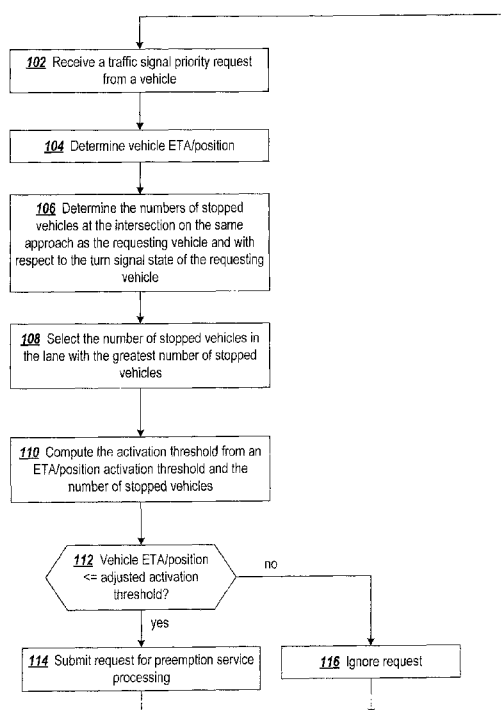
(54) **Title:** ADAPTIVE TRAFFIC SIGNAL PREEMPTION

FIG. 1

(57) **Abstract:** The disclosed approaches for processing traffic signal priority requests include receiving traffic signal priority requests from a vehicle. The number of stopped vehicles at the intersection and on an approach to the intersection is determined in response to receiving each priority request. An activation threshold is computed as a function of an estimated-time-of-arrival (ETA) threshold and the number of stopped vehicles. A vehicle ETA of the vehicle at the intersection is determined in response to each priority request. In response to the vehicle ETA being less than the activation threshold, the priority request is submitted for preemption service processing at the intersection. In response to the vehicle ETA being greater than the activation threshold, submission of the priority request is bypassed for preemption service processing at the intersection.



SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:**Declarations under Rule 4.17:**

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

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

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*