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(19) **United States**(12) **Patent Application Publication****Hayes et al.**(10) **Pub. No.: US 2023/0232185 A1**(43) **Pub. Date:****Jul. 20, 2023**(54) **GENERATING AND TRANSMITTING
PARKING INSTRUCTIONS FOR
AUTONOMOUS AND NON-AUTONOMOUS
VEHICLES****H04W 4/40** (2006.01)**G07B 15/02** (2006.01)(52) **U.S. CL.**CPC **H04W 4/029** (2018.02); **G06Q 50/30**
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(2013.01); **G07C 5/008** (2013.01)(71) Applicant: **ALLSTATE INSURANCE
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(US); **Mark Slusar**, Chicago, IL (US)(21) Appl. No.: **17/892,255**(22) Filed: **Aug. 22, 2022****Related U.S. Application Data**(63) Continuation of application No. 15/239,983, filed on
Aug. 18, 2016, now Pat. No. 11,425,530.**Publication Classification**(51) **Int. Cl.****H04W 4/029** (2006.01)**G06Q 50/30** (2006.01)(57) **ABSTRACT**

Systems and apparatuses for receiving data from a plurality of sensors and using the data, as well as other data, to generate a parking recommendation for a first vehicle are provided. Data may be received from sensors associated with a first vehicle for which a parking recommendation may be generated. Data may also be received from sensors associated with other vehicles and/or from one or more structures or other non-vehicle devices. In some examples, historical parking data may be extracted from a database. The collected and extracted data may be used to generate a parking recommendation for the first vehicle. In some examples, pre-stored user preferences, may be used in generating the parking recommendation as well. The parking recommendation may then be transmitted to a computing device within the first vehicle and may be displayed on the computing device.

