



US 20230232299A1

(19) **United States**(12) **Patent Application Publication**
Venkataraman et al.(10) **Pub. No.: US 2023/0232299 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **EFFICIENT EMERGENCY SERVICES
FALLBACK**

(60) Provisional application No. 62/964,512, filed on Jan. 22, 2020.

(71) Applicant: **Apple Inc.**, Cupertino, CA (US)**Publication Classification**(72) Inventors: **Vijay Venkataraman**, San Jose, CA (US); **Srinivasan Nimmala**, San Jose, CA (US); **Longda Xing**, San Jose, CA (US); **Kavya B. Ravikumar**, San Diego, CA (US); **Krisztian Kiss**, Hayward, CA (US); **Yifan Zhu**, San Jose, CA (US); **Murtaza A. Shikari**, Mountain View, CA (US); **Robert K. Kitchens**, Cupertino, CA (US); **Haijing Hu**, Beijing (CN); **Robert Zaus**, Munich (DE)(51) **Int. Cl.**
H04W 36/14 (2009.01)
H04W 48/02 (2009.01)
H04W 60/04 (2009.01)
H04W 4/90 (2018.01)
(52) **U.S. Cl.**
CPC **H04W 36/14** (2013.01); **H04W 48/02** (2013.01); **H04W 60/04** (2013.01); **H04W 4/90** (2018.02)(21) Appl. No.: **18/184,424**(22) Filed: **Mar. 15, 2023****Related U.S. Application Data**

(63) Continuation of application No. 17/154,582, filed on Jan. 21, 2021.

(57) **ABSTRACT**

Apparatuses, systems, and methods for performing efficient emergency services fallback. A cellular network element may provide emergency services fallback information to a wireless device during 3GPP 5GS cellular registration. The emergency services fallback information may include an indication of whether emergency services fallback via fallback to evolved packet core service is supported. The emergency services fallback information may also include an indication of whether emergency services fallback via fallback to circuit switched service is supported.

