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## (12) United States Patent

#### Chen et al.

#### (54) ON-DEMAND SYSTEM INFORMATION REQUEST PROCEDURE AND ERROR HANDLING

- (71) Applicant: FG Innovation Company Limited, Tuen Mun (HK)
- Inventors: Hung-Chen Chen, Hsinchu (TW);
  Chie-Ming Chou, Hsinchu (TW);
  Yung-Lan Tseng, Hsinchu (TW)
- (73) Assignee: **FG Innovation Company Limited**, Tuen Mun (HK)
- (\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.
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- (51) Int. Cl.

H04W 4/00	(2018.01)
H04W 48/14	(2009.01)
H04W 48/16	(2009.01)
H04W 76/18	(2018.01)
H04W 36/30	(2009.01)
H04W 76/15	(2018.01)
H04W 36/08	(2009.01)
H04W 74/08	(2009.01)
H04W 76/28	(2018.01)

- (52) U.S. Cl.

## (10) Patent No.: US 10,791,502 B2

#### (45) **Date of Patent:** Sep. 29, 2020

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See application file for complete search history.

#### (56) **References Cited**

#### U.S. PATENT DOCUMENTS

2006/0189336 A1	* 8/2006	Miyata	H04W 48/18
		-	455/515
2015/0140999 A1		Zhang et al.	
2018/0270792 A1	* 9/2018	Park	H04W 76/27
2018/0376375 A1	* 12/2018	Turtinen	H04W 48/14
2019/0124715 A1	* 4/2019	Chen	H04W 76/11
2019/0215858 A1	* 7/2019	Ishii	H04W 76/25

#### FOREIGN PATENT DOCUMENTS

CN	107223353	Α	9/2017
CN	107690200	Α	2/2018
CN	107809753	Α	3/2018

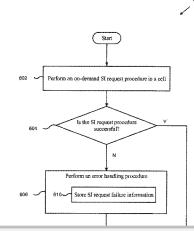
\* cited by examiner

Primary Examiner — Marcos Batista (74) Attorney, Agent, or Firm — ScienBiziP, P.C.

#### (57) **ABSTRACT**

A method of wireless communications performed by a user equipment (UE) is provided. The method includes performing an on-demand system information (SI) request procedure in a cell; and performing an error handling procedure if the on-demand SI request procedure in the cell is unsuccessful. The error handling procedure includes storing SI request failure information.

#### 20 Claims, 7 Drawing Sheets



100

Serving Node 104 SI Request Failure Information Request SI Request Failure Information 212 110 <u>102</u>

**OCKET** 

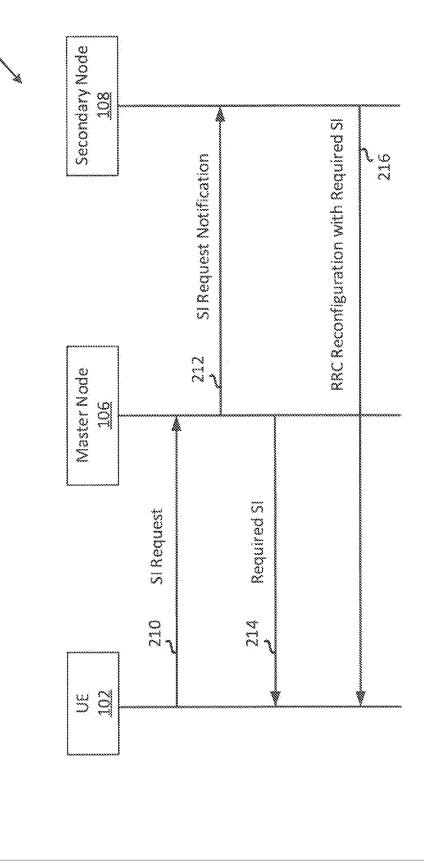
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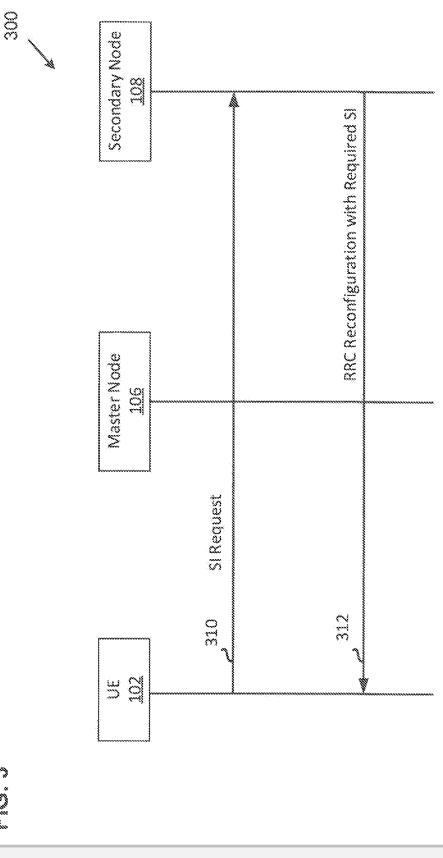
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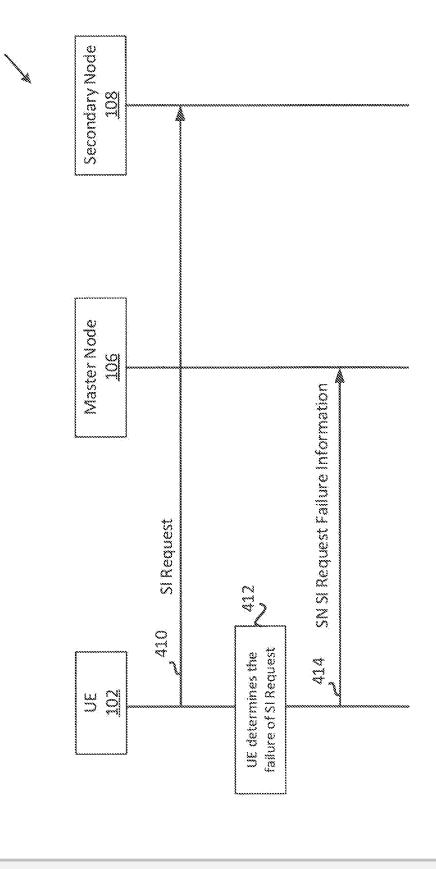
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