

EXHIBIT L



US008396072B2

(12) **United States Patent**
Jokinen et al.

(10) **Patent No.:** **US 8,396,072 B2**
(45) **Date of Patent:** **Mar. 12, 2013**

(54) **METHOD AND APPARATUS FOR CHANNEL TRAFFIC CONGESTION AVOIDANCE IN A MOBILE COMMUNICATION SYSTEM**

(58) **Field of Classification Search** 370/230, 370/328, 445
See application file for complete search history.

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(56) **References Cited**

U.S. PATENT DOCUMENTS

2005/0271000	A1	12/2005	Schulist
2007/0047580	A1	3/2007	Sachs et al.
2010/0135210	A1	6/2010	Kim et al.
2010/0227616	A1	9/2010	Hanov
2011/0189972	A1	8/2011	Sato et al.
2011/0242977	A1	10/2011	Tooyama et al.
2011/0305224	A1	12/2011	Lin
2011/0317777	A1	12/2011	Huang et al.

(73) **Assignee:** **Renesas Mobile Corporation**, Tokyo (JP)

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 264 days.

FOREIGN PATENT DOCUMENTS

WO	WO 2004/043099	A2	5/2004
WO	WO 2011/032420	A1	3/2011

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(21) **Appl. No.:** **13/031,355**

(22) **Filed:** **Feb. 21, 2011**

(65) **Prior Publication Data**

US 2012/0213071 A1 Aug. 23, 2012

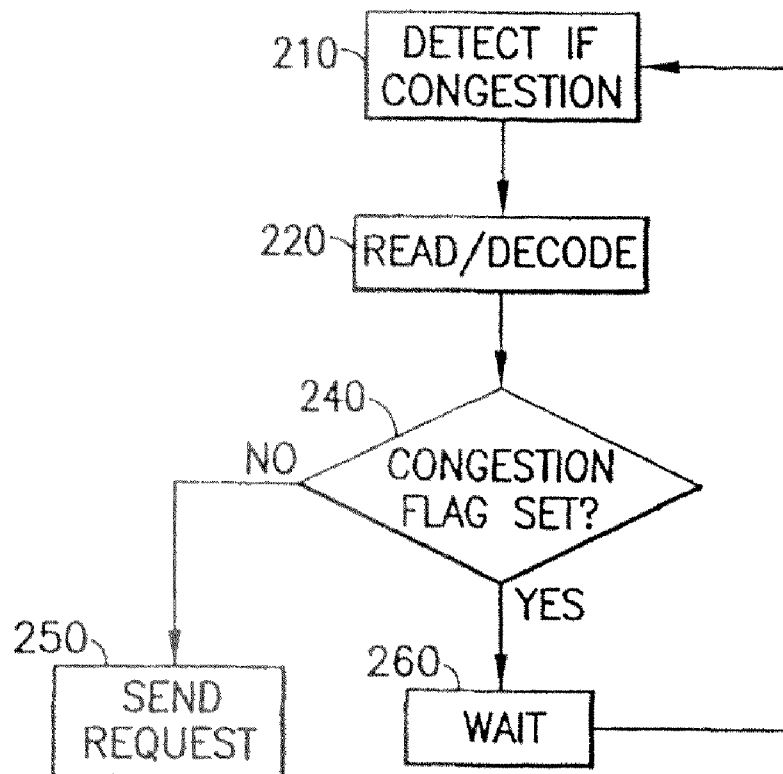
(51) **Int. Cl.**
H04L 12/413 (2006.01)

(52) **U.S. Cl.** **370/445; 370/230; 370/328**

(57) **ABSTRACT**

An apparatus, comprising at least one processor configured to receive and read a series of blocks on a first channel and determine whether there is congestion and if not transmitting a channel request on a second channel.

21 Claims, 4 Drawing Sheets



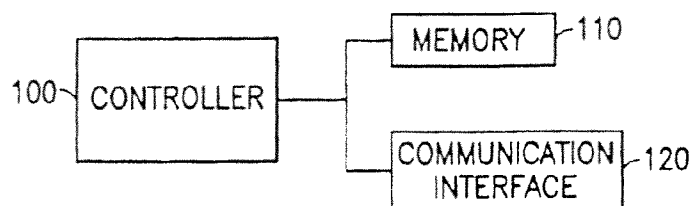


FIG. 1A

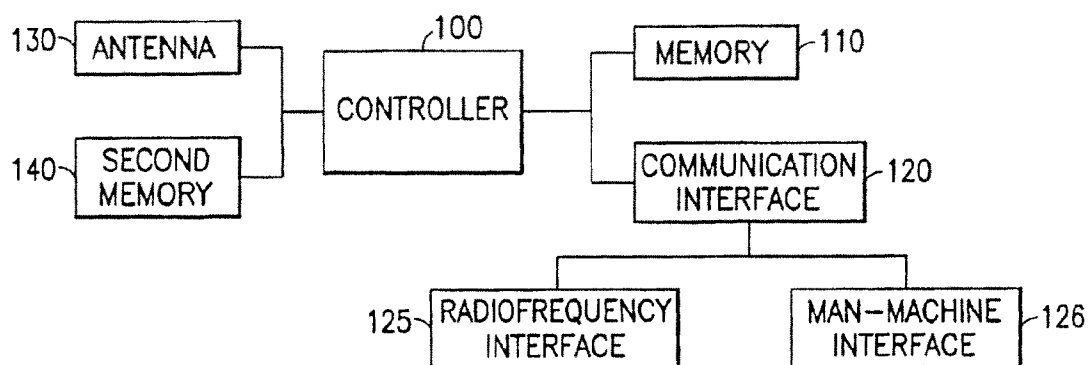


FIG. 1B

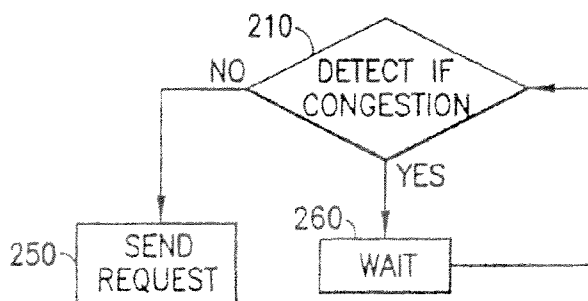


FIG. 2A

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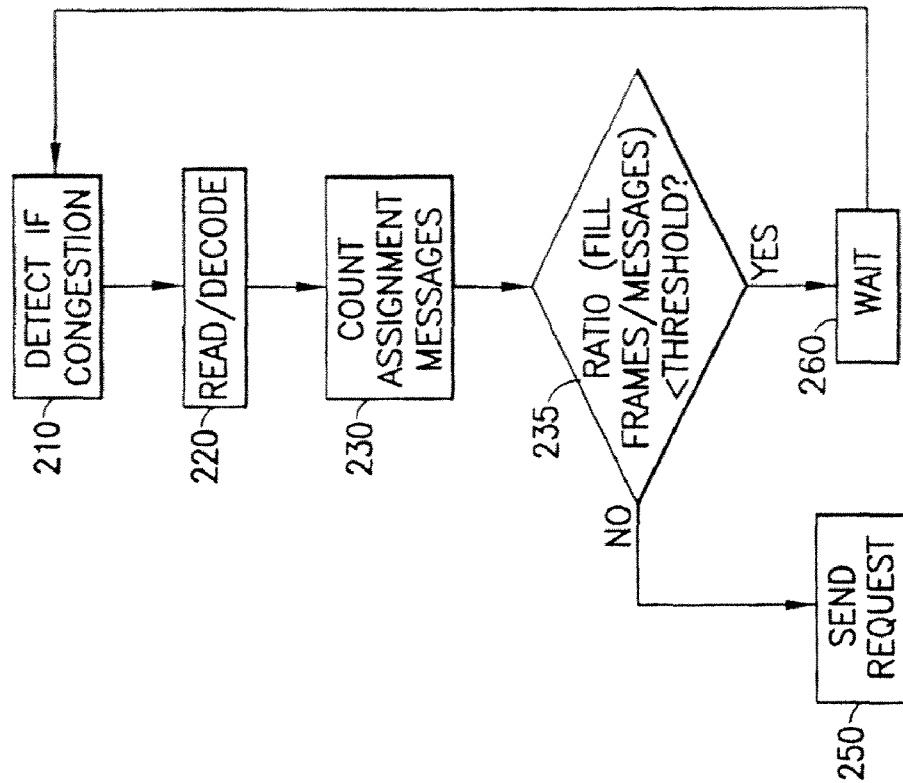


FIG. 2C

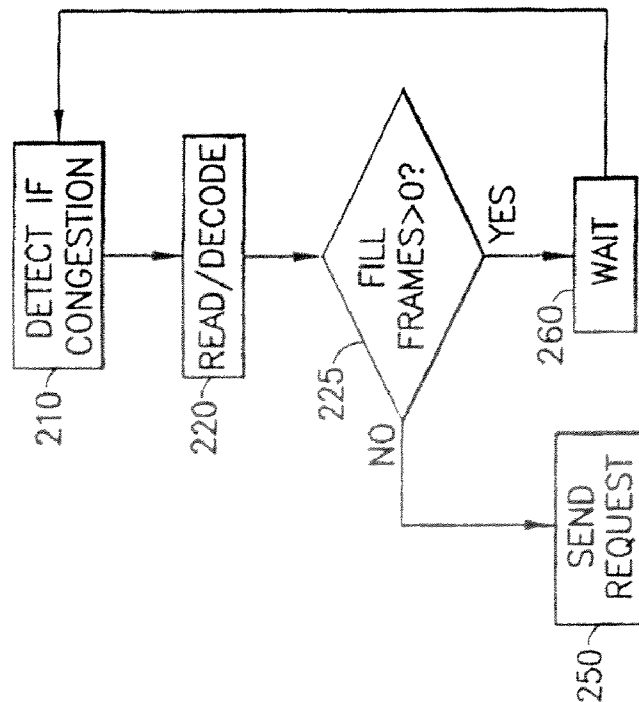


FIG. 2B

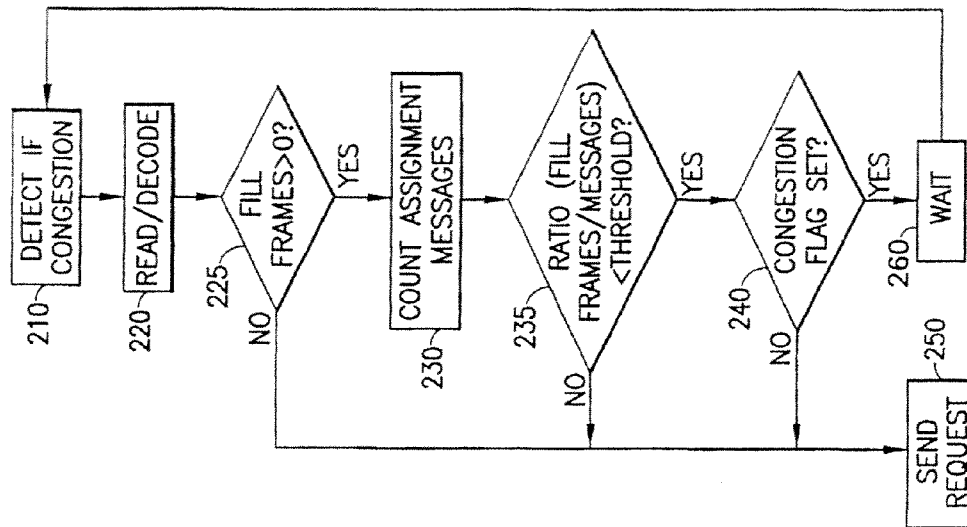


FIG. 2E

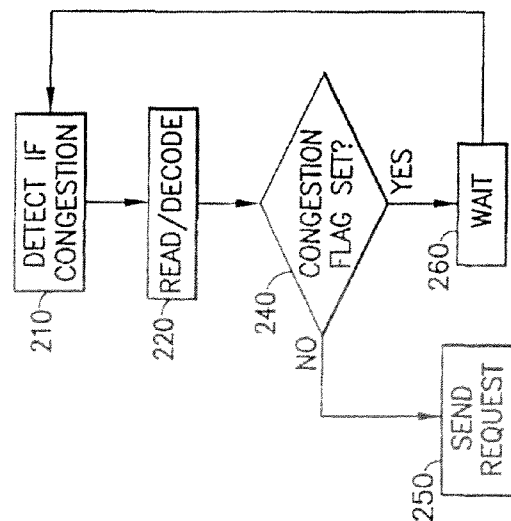


FIG. 2D

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