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Behera et al.

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(54) **DEVICE AND METHOD FOR RECOVERING SERVICES FROM NETWORK REJECTIONS TO WIRELESS COMMUNICATION DEVICES**

(56) **References Cited**

U.S. PATENT DOCUMENTS

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2010/0081434 A1* 4/2010 Ahluwalia H04W 60/06 455/435.1

2012/0135715 A1* 5/2012 Kang H04W 8/183 455/412.1

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(Continued)

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OTHER PUBLICATIONS

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(57) **ABSTRACT**

(30) **Foreign Application Priority Data**

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A wireless communication device is described in one example comprising a first communication module circuitry to communicatively couple the wireless communication device with a first network, the first communication module circuitry to receive a reject message from the first network to disable communications with the first network, a processor to store, in memory, information corresponding to the communications with the first network; and a second communication module circuitry to communicatively couple the wireless communication device with a second network, the second communication module circuitry to send the information to a remote service monitor, wherein the first communication module circuitry includes a first Subscriber Identity Module (SIM) or a first virtual SIM and the second communication module circuitry includes a second SIM or a second virtual SIM. Other embodiments may be described and/or claimed.

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