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Patterson + Sheridan, L.L.P. Qualcomm 24 Greenway Plaza, Suite 1600 Houston, TX 77046			SKRIPNIKOV, ALEX	
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* AAMOD D. KHANDEKAR,  
JUAN MONTOJO, and AVANEESH AGRAWAL

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Appeal 2019-002086  
Application 14/599,775  
Technology Center 2400

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Before CAROLYN D. THOMAS, JEREMY J. CURCURI, and  
MICHAEL J. ENGLE, *Administrative Patent Judges*.

ENGLE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 1–20 and 23. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

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<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42(a). Appellant identifies QUALCOMM Inc. as the real party in interest. Appeal Br. 3.

## TECHNOLOGY

The application relates to defining new control channels in legacy wireless networks. Spec. Abstract.

## ILLUSTRATIVE CLAIM

Claim 1 is illustrative and reproduced below with certain limitations at issue emphasized:

1. A method for receiving control data over non-legacy control channels in a wireless communication network, comprising:

receiving, by a wireless communications apparatus, non-legacy control data over a set of non-legacy control data resources, wherein the set of non-legacy control data resources are defined within general data communication resources of a legacy frame, and wherein *the non-legacy control data comprises at least one of an uplink or downlink resource assignment assigned to the wireless communications apparatus for transmitting general data communications thereover*; and

decoding the non-legacy control data.

## REFERENCE

The Examiner relies upon the following prior art references:

Ahmadi	US 2008/0095195 A1	Apr. 24, 2008
Cai	US 2009/0185632 A1	July 23, 2009
Ho-A-Chuck	US 5,828,962	Oct. 27, 1998
Kobayashi	US 6,721,564 B1	Apr. 13, 2004

## REJECTIONS

Claims 1, 2, 4–7, 9–12, 14–17, 19, and 20 stand rejected under pre-AIA 35 U.S.C. § 103(a) as obvious over Ahmadi and Cai.<sup>2</sup> Final Act. 2–5.

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<sup>2</sup> Although claim 23 is also initially listed, *see* Final Act. 2, it is not substantively analyzed under this rejection and instead is analyzed under its own rejection as noted below. *Id.* at 2–5.

Claim 23 stands rejected under pre-AIA 35 U.S.C. § 103(a) as obvious over Ahmadi, Cai, and Kobayashi. Final Act. 5.

Claims 3, 8, 13, and 18 stand rejected under pre-AIA 35 U.S.C. § 103(a) as obvious over Ahmadi, Cai, and Ho-A-Chuck. Final Act. 6.

### ISSUE

Did the Examiner err in finding Cai teaches or suggests “the non-legacy control data comprises at least one of an uplink or downlink resource assignment assigned to the wireless communications apparatus for transmitting general data communications thereover,” as recited in claim 1?

### ANALYSIS

Claim 1 recites “the non-legacy control data comprises at least one of an uplink or downlink resource assignment assigned to the wireless communications apparatus for transmitting general data communications thereover.” Independent claims 6, 11, and 16 recite commensurate limitations.

The Examiner finds that Cai “discloses the Frame Sync and Control signal 200 defines the subframe structure of the entire frame,” including “the directionality 202 of each subframe (i.e., whether the subframe is used for downlink or uplink transmissions).” Ans. 3–4 (citing Cai ¶ 65, Fig. 2). According to the Examiner, in Cai, the word “‘uplink’ refers to transmissions from a Mobile Station (MS) to a Base Station (BS)” whereas the word “‘downlink’ refers to transmission from BS to MS.” *Id.* at 4 (citing Cai ¶ 19). Therefore, the Examiner determines that “a person of ordinary skill in the art will understand that the Frame Sync and Control signal 200 is a resource assignment because MS uses Frame Sync and Control signal 200

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to determine when to use the resource (subframe) for transmission to the BS (uplink) and when to expect transmissions from the BS (downlink).” *Id.*

Appellant argues that although “Frame Sync and Control signal 200 provides . . . information indicating . . . which of the subframes . . . are uplink subframes and which are downlink subframes,” it fails to indicate “which of these subframes . . . are assigned *to the first wireless apparatus*” as opposed to being “assigned *to a completely different second wireless apparatus.*” Appeal Br. 10.

We agree with Appellant. The Specification explains that “[t]he resource allocation component 206 can assign one or more RBs *to the wireless device 302 and/or other* legacy wireless devices.” Spec. ¶ 54. Even if Cai taught a “special case” where there was only a single sender and a single recipient, *see* Cai ¶ 19, the claims require that “the non-legacy control data *comprises* . . . [the] resource assignment assigned to the wireless communications apparatus,” not that the assignment can be *inferred* from the control data. Therefore, the Examiner has not sufficiently shown how Cai’s directionality teaches or suggests this limitation.

The Examiner does not rely upon the additional references Kobayashi and Ho-A-Chuck to make up for the deficiency in Cai.

Accordingly, we do not sustain the Examiner’s rejection of claims 1–20 and 23.

DECISION

The following table summarizes the outcome of each rejection:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>References</b>	<b>Affirmed</b>	<b>Reversed</b>
1, 2, 4-7, 9-12, 14-17, 19, 20	§ 103	Ahmadi, Cai		1, 2, 4-7, 9-12, 14-17, 19, 20
23	§ 103	Ahmadi, Cai, Kobayashi		23
3, 8, 13, 18	§ 103	Ahmadi, Cai, Ho-A-Chuck		3, 8, 13, 18
<b>OVERALL</b>				1-20, 23

REVERSED