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DECISION ON APPEAL

I. STATEMENT OF THE CASE


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1 All references to the Final Action refer to the Final Action entered on July 23, 2014.
2 All references to the Appeal Brief refer to the Appeal Brief filed on December 30, 2014.
The Invention

Appellants invented a method, apparatus, and computer-readable medium for dynamically assigning radio resources between a frequency division duplexing (“FDD”) carrier and a time division duplexing (“TDD”) carrier. Spec. ¶ 4. According to Appellants, the claimed invention simultaneously uses both TDD and FDD schemes to help significantly enhance the achieved capacity of the radio resources. Id.

Related Appeal


Illustrative Claim

Claims 1, 6, 11, 16, 19, 25, and 28 are independent claims. Claims 2–5 directly or indirectly depend from independent claim 1; claims 7–10 directly or indirectly depend from independent claim 6; claims 12–15 directly or indirectly depend from independent claim 11; claims 17 and 18 directly or indirectly depend from independent claim 16; claims 20–23 directly or indirectly depend from independent claim 19, claims 26 and 27 directly depend from independent claim 25; and claims 29 and 30 directly depend from independent claim 28. Independent claim 1 is illustrative:
1. A method for dynamically assigning radio resources between a frequency division duplexing (FDD) carrier and a time division duplexing (TDD) carrier, the method comprising the acts of:

    monitoring, by a base station, radio resources of the FDD and TDD carriers;

    determining, by a base station, a type of information to be received via uplinks on the FDD carrier or the TDD carrier;

    dynamically allocating, by a base station, resource assignments for downlinks between the FDD carrier and the TDD carrier, based upon the radio resources of the FDD and TDD carriers; and

    dynamically allocating, by a base station, resource assignments for the uplinks between the FDD carrier and the TDD carrier, based upon the radio resources of the FDD and TDD carriers and the type of information to be received.


Prior Art Relied Upon

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Rejection on Appeal

Claims 1–23 and 25–30 were rejected under 35 U.S.C. § 102(b) as being anticipated by Uebayashi. Final Act. 3–5.

Examiner’s Findings

The Examiner finds that Uebayashi describes all the limitations recited in independent claims 1, 6, 11, 16, 19, 25, and 28. Final Act. 3–4. Of particular importance to this case, the Examiner finds that Uebayashi’s disclosure of assessing certain conditions and types of communication to determine whether it is possible to assign a channel a service area supporting

3 For clarity and ease of reference, we only list the first named inventor.
either a FDD or TDD method describes dynamically allocating resources for uplinks and downlinks, as required by these independent claims. *Id.* (citing Uebayashi ¶¶ 26–28, 51–54, 152, 189, 194, 197, claim 13).

**Appellants’ Contentions**

Appellants contend that Uebayashi does not distinguish between the allocation of resources for downlinks and uplinks, as required by independent claims 1, 6, 11, 16, 19, 25, and 28. App. Br. 5–6. That is, Appellants assert that Uebayashi does not describe having two different dynamic allocation steps for downlinks and uplinks, much less describe downlinks or uplinks at all. *Id.* at 6. Appellants assert that Uebayashi’s disclosure is limited to assigning channels between FDD and TDD methods. *Id.* at 6–7 (citing Uebayashi ¶¶ 10–12, 26–28, 51–54, 152, 189, 194, 197). In its Reply, Appellants reiterates its argument that Uebayashi does not distinguish between the allocation of resources for downlinks and uplinks. Reply Br. 1–2 (citing Uebayashi ¶¶ 26–28).4

II. ISSUE

Has the Examiner erred in determining that Uebayashi describes the following limitations recited in independent claims 1 and 6, and similarly recited in independent claims 11, 16, 19, 25, and 28:

(a) “dynamically allocating, by a base station, resource assignments for downlinks between the FDD carrier and the TDD carrier, based upon the radio resources of the FDD and TDD carriers”; and

(b) “dynamically allocating, by a base station, resource assignments for the uplinks between the FDD carrier and the TDD carrier, based upon the

4 All references to the Reply Brief refer to the Reply Brief filed on July 28, 2015.
radio resources of the FDD and TDD carriers and the type of information to be received” (“dynamically allocating limitations”)?

III. ANALYSIS

Claims 1, 6, 11, 16, 19, 25, and 28

We do not discern error in the Examiner’s anticipation rejection of independent claims 1 and 6, each of which recites, amongst other things, the dynamically allocating limitations reproduced above. We also do not discern error in the Examiner’s anticipation rejection of independent claims 11, 16, 19, 25, and 28, each of which recites similar limitations.

The Examiner takes the position that Uebayashi’s disclosure of assessing certain conditions and types of communication to determine whether it is possible to assign a channel a service area supporting either a FDD or TDD method describes the dynamically allocating limitations. Final Act. 3–4 (citing Uebayashi ¶¶ 26–28, 51–54, 152, 189, 194, 197, claim 13). In its Answer, the Examiner finds that Uebayashi’s disclosure of communications between a mobile station and base station amounts to communications on an uplink or downlink. Ans. 4–6 (citing Uebayashi ¶¶ 26–28).⁵ According to the Examiner, Uebayashi’s disclosure of assigning a communication channel a service area based on certain conditions (e.g., availability, traffic, etc.) and the type of communication related to the request for channel assignment (e.g., voice or data communication) satisfies the dynamically allocating limitations because the communication channel is assigned to service areas supporting either FDD or TDD methods based on the resources of the carrier providing the service and the type of information

⁵ All references to the Examiner’s Answer refer to the Answer mailed on May 28, 2015.
related to the request for channel assignment. *Id.* at 4–5. The Examiner argues that Appellants’ argument that the dynamically allocating limitations are distinguishable from Uebayashi is predicated on removing an element (i.e., “the type of information to be received”) from the allocation of resources for downlinks. *Id.* at 5. The Examiner asserts that merely removing or rearranging elements already disclosed by the prior art—in this case, Uebayashi—does not render independent claims 1, 6, 11, 16, 19, 25, and 28 patentable. *Id.*

As an initial matter, the Examiner has presented sufficient evidence to support a finding that Uebayashi describes the dynamically allocation limitations. *See* Final Act. 3–4; Ans. 3–5. Indeed, Uebayashi describes assigning communication channels between mobile stations and base stations—be it via an uplink or downlink—based on the following two conditions: (1) based on the traffic and availability of a service areas supporting either FDD or TDD methods; and (2) the type of communication associated with the request for channel assignment (e.g., voice or data communication). Uebayashi ¶¶ 26–28, 51–54, 189, 194. Uebayashi further discloses that the base station is capable of performing the assignment operations. *Id.* ¶ 197.

We are not persuaded by Appellants’ argument that Uebayashi does not account properly for the dynamically allocating limitations because, purportedly, Uebayashi does not distinguish between the allocation of resources for downlinks and uplinks. *See* App. Br. 5–7; Reply Br. 1–2. Appellants’ argument in this regard is predicated on the notion that independent claims 1, 6, 11, 16, 19, 25, and 28 necessarily require two different allocation steps for downlinks and uplinks. Each of these claims, however, uses the open-ended transition term “comprising,” which does not
exclude the presence of additional elements not recited in these claims. *In re Baxter*, 656 F.2d 679, 686–87 (CCPA 1981). In other words, although each of these claims (with the exception of independent claim 28) requires allocating resources for uplinks that are based on “the type of information to be received,” they do not preclude allocating resources for downlinks from also being based on “the type of information to be received.” As we explain above, Uebayashi describes the allocation of resources for downlinks and uplinks by assigning communication channels between mobile stations and base stations—be it via an uplink or downlink—based on two conditions, one of which includes the type of communication associated with the request for channel assignment (e.g., voice or data communication). Uebayashi ¶¶ 26–28, 51–54, 189, 194.

To the extent Appellants argue that Uebayashi does not describe the dynamically allocating limitations because it does not disclose explicitly “downlinks” or “uplinks,” we are not persuaded. See App. Br. 6. It is well-settled that the test for anticipation “is not an ‘ipsissimis verbis’ test.” *In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990). In our view, Uebayashi’s communication channels convey both uplinks and downlinks because they provide transmission paths from mobile station 11 to base stations 21–23 and vice-versa. Uebayashi ¶ 152, Fig. 1. It follows that the Examiner has not erred in determining that Uebayashi anticipates independent claims 1, 6, 11, 16, 19, 25, and 28.

*Claims 2, 4, 5, 7, 9, 10, 12, 14, 15, 17, 18, 20, 22, 23, 26, 27, 29, and 30*

Appellants do not provide separate and distinct patentability arguments with respect to dependent claims 2, 4, 5, 7, 9, 10, 12, 14, 15, 17, 18, 20, 22, 23, 26, 27, 29, and 30. We, therefore, group these dependent claims with their underlying base claims. Consequently, dependent claims
8

Appeal 2015-007197
Application 11/407,035
2, 4, 5, 7, 9, 10, 12, 14, 15, 17, 18, 20, 22, 23, 26, 27, 29, and 30 fall with independent claims 1, 6, 11, 16, 19, 25, and 28, respectively. See 37 C.F.R. § 41.37(c)(1)(iv).

Claims 3, 8, 13, and 21


The Examiner finds that Uebayashi’s disclosure of on-demand processing amounts to allocating resource assignments on a “burst-by-burst basis.” Final Act. 4 (citing Uebayashi ¶¶ 26–28, 51–54, 152, 189, 194, 197). The Examiner further finds that, upon reviewing the specification, “burst-by-burst basis” should be construed as assigning traffic to various carriers on a case-by-case basis, carrier-by-carrier basis or per traffic request/demand. Ans. 6 (citing Spec. ¶ 15). According to the Examiner, Uebayashi’s disclosure of requesting a channel assignment amounts to an on-demand or burst-by-burst basis because each request or demand would result in a burst-by-burst traffic allocation. Id.

Appellants contend that Uebayashi is silent with respect to the particular feature required by dependent claims 3, 8, 13, and 21. App. Br. 7. Appellants also disagree with the Examiner’s interpretation of “burst-by-burst basis” as meaning a case-by-case basis. Reply Br. 2 (citing Spec. ¶ 15). According to Appellants, a more reasonable interpretation of allocating assignments on a “burst-by-burst basis” in light of the Specification is allocating resource assignments a single unit of resource allocation at a time. Id. (citing Spec. ¶ 13). Appellants asserts that Uebayashi does not describe allocating resource assignments in this manner, but rather only discloses switching channel assignments between TDD and
FDD carriers and detecting the balance at a mobile station between forward and reverse traffic. *Id.* at 2–3.

We begin our analysis by first determining the scope and meaning of allocating resource assignments on a “burst-by-burst basis.” Upon reviewing the Specification, we agree with Appellants that the broadest reasonable interpretation of this claim term is allocating resource assignments a single unit of resource allocation at a time. *See* Reply Br. 2. The Specification supports Appellants’ interpretation because it discloses that “the interoperability [between TDD and FDD modes of operation] can occur on a *burst-by-burst basis, where a burst is single unit of resource allocation.*” Spec. ¶ 13 (emphasis added). Figure 1 and its corresponding description in the Specification also support Appellants’ interpretation by disclosing that device 125 (e.g., a mobile station) allocates resources one burst at a time (i.e., Bursts 1–7) between a TDD carrier and an FDD carrier. *Id.* ¶ 15. With this in mind, we turn to the merits of the Examiner’s position.

Although we decline to adopt the Examiner’s proposed construction for allocating resource assignments on a “burst-by-burst basis,” we note that, even under the construction we adopt above, the Examiner directs us to sufficient evidence to support a finding that Uebayashi describes this particular feature. That is, Uebayashi’s disclosure of assigning or switching a communication channel for a mobile station from a service area supporting an FDD method to a communication channel for a service area supporting a TDD method (or vice-versa) amounts to allocating resource assignments a single unit of resource allocation at a time because such assigning or switching is performed one channel at a time. Uebayashi ¶¶ 26–28, 51–54, 189, 194. It follows that the Examiner has not erred in determining that Uebayashi anticipates dependent claims 3, 8, 13, and 21.
IV. CONCLUSION OF LAW

The Examiner has not erred in rejecting claims 1–23 and 25–30 under § 102(b) as being anticipated by Uebayashi.

V. DECISION

We affirm the Examiner’s decision to reject claims 1–23 and 25–30. No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED