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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 10/832,514 | 04/27/2004 | Larry Lynn Williams | HSJ920040038US1 | 3737 |

7590 01/16/2013

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| EXAMINER |
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| DOAN, DUC T |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2185 | |

| MAIL DATE | DELIVERY MODE |
|---|---|
| 01/16/2013 | PAPER |

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* LARRY LYNN WILLIAMS

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Appeal 2010-005943
Application 10/832,514
Technology Center 2100

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Before JOSEPH L. DIXON, JEAN R. HOMERE, and
ST. JOHN COURTENAY III, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF THE CASE

The Patent Examiner finally rejected claims 1, 2, 4-11, 13, 15-19, and 21-25. Claims 3, 12, 14, and 20 were canceled. (App. Br. 2). Appellant appeals therefrom under 35 U.S.C. § 134(a). We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

## INVENTION

This invention relates to computer systems having "a combination of a high performance disk drive and a physically smaller and lower cost drive." (Spec. 2). Claim 1, reproduced below, is illustrative of the claimed subject matter:

> 1. A computer system comprising:
>
> at least a primary disk drive connectable to a system bus and having a primary disk drive controller; and
>
> at least a secondary disk drive connectable to the system bus and having a secondary disk drive controller, the disk drive controllers having the capability of communicating directly with each other without requiring a processor of a computer hosting the disk drives to facilitate communication between the disk drives, wherein the controllers communicate with each to determine which disk drive will store which data from the host computer independently of the host computer such that which disk drive on which at least one piece of data is stored is dictated by the drive controllers and not by the host computer.

## REJECTIONS

R1. Claims 9 and 21 stand rejected under 35 U.S.C. §112, second paragraph as being indefinite.

R2. Independent claim 1 and dependent claims 4, 5, and 9 stand rejected under 35 U.S.C. § 103 as being unpatentable over Beal, USPN 6,073,221 in view of Wang, USPN 6,826,613.

R3. Dependent claim 2 stands rejected under 35 U.S.C. §103 as being unpatentable over Beal in view of Wang and Cochran, USPP 2005/0097132.

R4. Dependent claims 6-8 stand rejected under 35 U.S.C. § 103 as being unpatentable over Beal in view of Wang and Gitlin, USPN 6.757,841.

R5. Independent claim 10 and dependent Claims 11 and 15-17 stand rejected under 35 U.S.C. § 103 as being unpatentable over Beal in view of Smith, USPN 6,594,724 and Gitlin.

R6. Dependent claim 13 stands rejected under 35 U.S.C. § 103 as being unpatentable over Beal in view of Smith, Gitlin, and Cochran.

R7. Independent claim 18 and dependent claims 21 and 22 stand rejected under 35 U.S.C. §103 as being unpatentable over Beal in view of Smith and Taylor, USPN 6,233,607.

R8. Dependent claim 19 stands rejected under 35 U .S.C. § 103 as being unpatentable over Beal in view of Smith, Taylor, and Cochran.

R9. Dependent claims 23-25 stand rejected under 35 U.S.C. §103 as being unpatentable over Beal in view of Smith, Taylor, and Gitlin.

## PRIOR DECISION

Appeal No. 2008-3798 (Application No. 10/832,514), mailed May 7, 2009. (Examiner Affirmed-in-part.).

## ANALYSIS

We disagree with Appellant's contentions regarding the Examiner's indefiniteness rejection and obviousness rejections of the claims. We adopt as our own: (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken, and (2), the reasons set forth by the Examiner in the Answer in response to arguments made in Appellant's Appeal Brief. (Ans.15-32). We highlight and address specific findings and arguments below.

### A. REJECTION UNDER §112 OF CLAIMS 9 AND 21

Appellant contends:

> Using the indefinite article to refer to "bus" does not render the claim indefinite, only somewhat broader than use of the definite article would permit. In other words, the bus of Claim 9 may be the bus of Claim 1 or another bus, but "breadth is not indefiniteness, MPEP §2173.05.

(App. Br. 10).

Appellant's contentions are unpersuasive. We conclude that the "a system bus" recited in claim 9 is indefinite because it is not clear whether the system bus in claim 9 refers to the same "a system bus" that is recited in claim 1 (line 2), or to a different system bus. (*See* Ans. 16). Claim 9 depends from claim 1. "[I]f a claim is amenable to two or more plausible claim constructions, the USPTO is justified in requiring the applicant to

more precisely define the metes and bounds of the claimed invention by holding the claim . . . indefinite." *Ex parte Miyazaki*, 89 USPQ2d 1207, 1211 (BPAI 2008) (precedential).

Regarding claim 21, the Examiner indicated in the Advisory Action mailed Dec. 1, 2009 that the amendment filed Nov. 20, 2009 would be entered on appeal. The entered amendment cured the antecedent basis problem with "the system bus" recited in claim 21, which depends from independent claim 18 which does not recite "a system bus." (Claim 21 was amended to recite "a system bus."). However, the entered amendment did not cure the aforementioned § 112 problem with claim 9, which depends from claim 1. Although the Examiner indicates in the remarks on page 2 of the Advisory Action (mailed Dec. 1, 2009) that "the amendment of claim 21 overcomes the rejection under 112 second paragraph for this claim," we note that the Examiner nevertheless maintained the § 112, second paragraph rejection of claim 21 in the Answer. (Ans. 3). Therefore, we sustain the Examiner's § 112, second paragraph, rejection of claim 9, but reverse the Examiner's § 112, second paragraph, rejection of claim 21.

### B. Obviousness Rejection of Claim 1

*1.*

Appellant contends:

> Beal explicitly and unambiguously teaches away from Claim 1. Beal requires the transfer of data to be accomplished "in concert with CPU 12" "to assure that completely identical data exists in both systems", col. 3, lines 6 and 7. Claim 1, in marked contrast, requires the disk drive controllers to communicate with each to determine which disk drive will store which data from the host computer *independently of the host computer*

> such that which disk drive on which at least one piece of data is stored is dictated by the drive controllers *and not by the host computer*.

(Reply Br. 2).

"A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *In re Kahn*, 441 F.3d 977, 990 (Fed. Cir. 2006) (citations and internal quotation marks omitted).

Here, the Examiner does not rely on Beal's teaching of mirroring data on two disks using a CPU. Moreover, we find that one skilled in the art would not have been discouraged from using Beal's general teaching of a primary and secondary disk drive/IO controller connected to a system bus because this is a use of old elements used in a predictable manner and does not require mirroring data on two disks using a CPU. (*See* Ans. 18-19).

*2.*

Appellant contends "that were Wang combined with Beal the combination would result in each individual disk drive of Beal incorporating the switches of Wang to communicate with the disks of that individual disk drive, which would fail to reach Claim 1, which requires inter-drive communication, not intra-drive communication." (Reply Br. 3).

Appellant's contentions are not persuasive because the Examiner relies on Wang's teaching of inter-drive communications. (Ans. 4-5; 18-19). Moreover, Appellant does not rebut the Examiner's proffered motivation for combining Wang's inter-drive communication teaching with Beal. (Ans. 19).

*3.*

Appellant contends that "the 'load balancing' discussed in col. 22 of Wang relates *not* to where data is stored within the single drive of Wang but rather to which switch transfers data from the various disks to the host computer." (Reply Br. 3-4).

Appellant's contentions are not persuasive because Appellant does not specify or cite to a teaching in Wang to support the contention and rebut the Examiner's findings.[1] (Ans. 19-20). Specifically, Wang's teaching that the first switch runs a load balancing algorithm that monitors the disks (col. 22, ll. 37-43) would have taught or suggested that the switch determines which disk will store data. (*See* Ans. 18-20).

For these reasons, we are not persuaded of Examiner error.

OBVIOUSNESS REJECTION OF CLAIM 7

Appellant contends:

> As to Appellant's good faith observation that Gitlin nowhere mentions the concept of low contention, much less that the primary disk drive satisfies requests for the critical data under conditions of low contention on the primary disk drive and the secondary disk drive satisfies requests for the critical data otherwise, page 25 of the Answer weakly counters with what appears to be an allegation that low contention exists in Gitlin at boot. The Answer then alleges that if one O.S. fails the system

[1] Attorney "argument … cannot take the place of evidence." *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974). *See, e.g., In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997) (attorney arguments or conclusory statements are insufficient to rebut a prima facie case).

> of Gitlin can use another O.S. However, this obviously fails to rebut Appellant's correct explanation that Gitlin does not contemplate using a specific drive under periods of low contention and another drive otherwise, militating toward reversal.

(Reply Br. 4).

Appellant's contentions are not persuasive because we find that Gitlin's teaching of load balancing (contention) (Ans. 27; 24-25) and storing the operating system on two disks (Ans. 25) would have taught or suggested to one skilled in the art the claim 7 limitations of using the primary disk only under conditions of low contention and the secondary disk otherwise. This suggestion is further buttressed by Wang's teaching of load balancing (Ans. 4-5, 18). For these reasons, we are not persuaded of Examiner error.

### OBVIOUSNESS REJECTION OF CLAIM 10

Appellant contends that claim 10 is non-obvious for at least similar reasons asserted for claim 7, which has similar limitations to claim 10's limitations at issue. (Reply Br. 4; App. Br. 8-9). We are not persuaded by Appellant's contentions for the reasons given above regarding claim 7 and for the reasons given by the Examiner (Ans. 25-28).

### OBVIOUSNESS REJECTION OF CLAIM 18

Appellant contends:

> The fact that the examiner now purports (Answer. page 31, lines 16 and 17) to rely on Taylor for movement of data between drives of differing speed/capacity cannot conceal the teaching away in Taylor from Claim 18, since a reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention, *WL. Gore* &

> *Associates, Inc.* v. *Garlock, Inc.,* 721 F.2d 1540, (Fed. Cir. *1983), cert. den.,* 469 U.S. 851 (1984).

(Reply Br. 6).

Appellant's contentions are not persuasive because the Examiner does not rely upon Taylor for a general teaching of the speeds of the primary and secondary disk drives. (Ans. 30-32). The Examiner relies upon Taylor for the off loading and on Smith for the speeds of the disk drives. (*Id.*). Moreover, we find that one skilled in the art would not be discouraged from using Taylor's general teaching of off loading from a primary disk to a secondary disk because this is this is an inference one skilled in the art would have made.[2] (Ans. 30-31). *Kahn*, 441 F.3d at 990. For these reasons, we are not persuaded of Examiner error.

CLAIMS 2, 4, 5, 6, 8, 9, 11, 13, 15, 16 17, 19, 21, 22, 23, 24, AND 25

Although Appellant presents nominal separate arguments for claims 2, 4, 5, 6, 8, 9, 11, 13, 15, 16 17, 19, 21, 22, 23, 24, and 25, we affirm the Examiner's rejections of these claims for the reasons set forth by the Examiner in the Answer, and for the reasons discussed above regarding commensurate limitations and issues.

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[2] "[A]nalysis need not seek out precise teachings directed to the specific matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR Int'l Co. v. Teleflex Inc.* 550 U.S. 398, 418 (2007).

DECISION

We reverse the Examiner's rejection of claim 21 under § 112.

We affirm the Examiner's rejection of claim 9 under § 112.

We affirm the Examiner's rejections of claims 1, 2, 4-11, 13, 15-19, and 21-25 under §103.

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, the Examiner's decision is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

No time for taking any action connected with this appeal may be extended under 37 C.F.R. § 1.136(a)(1). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

pgc