

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* DANIEL M. DREPS, FRANK D. FERRIAOLO,  
KEVIN C. GOWER, MARK W. KELLOGG, and ROGER A. RIPPENS

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Appeal 2007-3781  
Application 10/977,884  
Technology Center 2100

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Decided: April 23, 2008

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*Before* JAMES D. THOMAS, ALLEN R. MACDONALD, and THU A. DANG, *Administrative Patent Judges.*

MACDONALD, *Administrative Patent Judge.*

DECISION ON APPEAL

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## STATEMENT OF THE CASE

This is an appeal under 35 U.S.C. §§ 6(b) and 134(a) from a final rejection of claims 1-23.

Claim 1 is exemplary:

1. A method for re-driving data in a memory subsystem, the method comprising:

receiving controller interface signals and a forwarded interface clock that travels with the controller interface signals at a memory module that is part of a cascaded interconnect system;

sampling the controller interface signals with the forwarded interface clock, the sampling resulting in the controller interface signals being latched into interface latches;

latching the sampled controller interface signals into local latches using a local clock on the memory module; and

transmitting the contents of the local latches along with the local clock to an other memory module or controller in the cascaded interconnect system.

The reference relied upon by the Examiner in rejecting the claims on appeal is:

Vogt                    US 2004/0250153                    Dec. 9, 2004

Claims 1-15 and 17-23 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Vogt.

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Claim 16 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Vogt.

We affirm.

#### FINDINGS OF FACT

The following Findings of Fact (FF) are shown by a preponderance of the evidence.

*Vogt*

1. Vogt discloses transmitting data and a reference clock signal to a memory module 52. (Fig. 6, items 50, 52, 54, 76, and 78 and ¶¶[0039], [0041], and [0042].)
2. Vogt discloses that memory module 52 uses the received clock signal to sample received data. (*Id.*)

#### PRINCIPLES OF LAW

Appellants have the burden on appeal to the Board to demonstrate error in the Examiner's position. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006).

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987).

## ANALYSIS

### Claims 1-15 and 17-23

Appellants group these claims together under a separate heading and present the same arguments for all claims in this group. We select claim 1 as the representative claim to decide the appeal of all claims in this group. 37 C.F.R. § 41.37(c)(1)(vii) (2005).

The Examiner finds that Vogt anticipates claim 1. (Ans. 3-4.) Appellants allege that Vogt fails to disclose a claimed travel aspect comprising “receiving controller interface signals and a forwarded interface clock that travels with the controller interface signals at a memory module” of claim 1. (App. Br. 4-6.) Appellants do not dispute that Vogt’s data discloses the claimed “controller interface signals.” (*Id.*) Rather, Appellants argue that Vogt fails to disclose the claimed travel aspect because Vogt discloses that a reference clock signal is *separately routed to each* of the memory modules independent of the data. (*Id.*) Thus, the issue is whether Appellants have shown that the Examiner erred by finding that Vogt discloses the claimed travel aspect.

We begin our analysis by construing the claimed travel aspect. Appellants’ Specification provides no explicit definition of the claimed “travels with” of the claimed travel aspect but describes transferring a clock signal and controller interface signals using memory buses 902 and 904. (Spec. ¶[0039].) We agree with the Examiner’s construction of the claimed travel aspect (Ans. 10) and broadly but reasonably construe the claimed

travel aspect to involve the clock signal and controller interface signals traveling at the same time and meeting at the memory module. Moreover, we agree with the Examiner that Appellants' construction of the claimed travel aspect to require that the clock travels on the memory bus with controller interface signals to each memory module (App. Br. 4-6) reads limitations from Appellants' Specification that are not required by the claimed travel aspect (Ans. 9-10). *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989)). We note that Appellants are not precluded from amending the claims to include the features that are argued to be present in the claims.

Vogt discloses transmitting data and a reference clock signal to a memory module 52. (FF 1.) Vogt discloses that memory module 52 uses the received clock signal to sample received data. (FF 2.) We agree with the Examiner (Ans. 10) and find that Vogt discloses transmitting a clock signal and data signal at the same time and the clock signal and data signal arrive at the memory module. Accordingly, we find that Vogt discloses the claimed travel aspect. Therefore, we sustain the Examiner's rejection of claim 1 and claims 2-15 and 17-23 under 35 U.S.C. § 102(e) as being anticipated by Vogt.

#### Claim 16

Claim 16 is subject to an obviousness rejection over Vogt. Appellants argue that the Examiner erred in rejecting Claim 16 for reasons set forth with regard to claim 1. (App. Br. 6.) For the same reasons provided with regard

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to claim 1, we conclude that Appellants have not shown that the Examiner erred in concluding that claim 16 is obvious over Vogt. Therefore, we sustain the Examiner's rejection of claim 16 for being obvious over Vogt.

#### CONCLUSION OF LAW

We conclude that:

- (1) Appellants have not shown that the Examiner erred in finding Claims 1-15 and 17-23 unpatentable under 35 U.S.C. § 102(e) as being anticipated by Vogt;
- (2) Appellants have not shown that the Examiner erred in finding Claim 16 unpatentable under 35 U.S.C. § 103(a) over Vogt; and
- (3) Claims 1-23 are unpatentable.

#### DECISION

The Examiner's rejections of claims 1-23 are affirmed.

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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

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