

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KENNETH JAMES BARKER,
HAYDEN CLAVIE CRANFORD, JR., CHARLES REEVES HOFFMAN,
JEFFREY JAMES LYNCH, and MARK EDMUND SCHEUER

Appeal 2008-2677
Application 09/839,179
Technology Center 2100

Decided: January 16, 2009

Before JOSEPH L. DIXON, LANCE LEONARD BARRY, and
HOWARD B. BLANKENSHIP, *Administrative Patent Judges*.

DIXON, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

A Patent Examiner rejected claims 1, 2, and 4-20. The Appellants appeal therefrom under 35 U.S.C. § 134(a). We have jurisdiction under 35 U.S.C. § 6(b)

A. INVENTION

The invention at issue on appeal relates to power conservation in communication systems. If both devices are capable of a low power mode, then subsequently, in response to conditions of low usage, the devices exchange signals indicating eligibility. If both devices are eligible for the low power mode, then both ends of the system enter a low power usage state and remain therein until signals are exchanged that permit data communication by resumption of normal power modes by both ends of the data exchange system. (Spec. 1-2.)

B. ILLUSTRATIVE CLAIM

1. A method of conserving power consumption in a communication system which includes components capable of selectively entering a low power operating mode, components capable of determining eligibility of the system to enter a low power operating mode based on operator generated signals, time of day, or non-use of the system for a period of time, or a combination thereof, and an auto-negotiation feature by exchanging messages indicative of a low power operating mode capability, using an auto-negotiation feature to interpret exchanged signals to verify that connected systems include the low power mode capability and eligibility to enter the low power mode, and transmitting a signal that a communications session is completed to cause connected systems to enter the low power mode.

C. REFERENCES

The Examiner relies on the following references as evidence:

Edem	US 5,805,597	Sep. 8, 1998
Hobson	US 6,360,327 B1	Mar. 19, 2002

D. REJECTIONS

The Examiner makes the following rejections:

Claims 1-2 and 4-8 stand rejected under 35 U.S.C. § 102(b) as being clearly anticipated by Edem.

Claims 9-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Edem in view of Hobson.

ISSUE

Have Appellants shown error in the Examiner's initial showing of anticipation of claims 1, 2, and 4-8 over Edem?

PRINCIPLES OF LAW

35 U.S.C. § 102

"[A]nticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim" *In re King*, 801 F.2d 1324, 1326 (Fed. Cir. 1986) (citing *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1457 (Fed. Cir. 1984)). "[A]bsence from the reference of any claimed element negates anticipation." *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, 1571 (Fed. Cir. 1986).

"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., Inc. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). Analysis of whether a claim is patentable over the prior art under 35 U.S.C. § 102 begins with a determination of the scope of the claim. We determine the scope of the claims in patent

applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). The properly interpreted claim must then be compared with the prior art.

Appellants have the opportunity 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).

In rejecting claims under 35 U.S.C. § 102, "[a] single prior art reference that discloses, either expressly or inherently, each limitation of a claim invalidates that claim by anticipation." *Perricone v. Medicis Pharm. Corp.*, 432 F.3d 1368, 1375 (Fed. Cir. 2005) (citation omitted).

ANALYSIS

At the outset we note that Appellants' "Summary of the Claimed Subject Matter" does not specifically address the specific claim language and is a generalized presentation with respect to the disclosed invention. For example, in independent claim 4, Appellants set forth "means plus function" limitations, but the "Summary of the Claimed Subject Matter" does not correlate those functions to the disclosed structure, acts or materials in the Specification. Therefore, it is unclear what "protocol" Appellants refer to in the arguments since a protocol is not set forth in the claims, but a "protocol means" is set forth. Additionally, each of the independent claims appears to set forth a method, but it is unclear where each of the distinct steps of the method begins and ends. Therefore, we interpret the claims giving the

claimed terminology its ordinary and customary meaning. With this as a starting point, we address Appellants' arguments directed to anticipation.

Appellants argue that Edem teaches neither the eligibility criteria nor components as recited in independent claim 1 nor a protocol as recited in independent claim 4 nor an exchange of signals as recited in independent claim 5 for determining eligibility. (App. Br. 3). Appellants contend that there is nothing in Edem about "eligibility" to enter a low power mode being based on certain factors, and certainly not any component or protocol or exchange of signals for such. Appellants further contend that the claimed invention has two distinct functions taught and claimed. (App. Br. 3-4).

Here, we find Appellants' arguments to be based upon an overly broad generalization of the claimed invention rather than the specific language recited in the claims. Therefore, we do not find Appellants' arguments persuasive of error in the Examiner's initial showing of anticipation as set forth at pages 3-4 of the Answer.

We find that Edem teaches the use of an auto-negotiation procedure to reconfigure the link for low power mode operations and uses an auto-negotiation protocol as identified in column 13 to switch between 10BASE T 205 and low power mode 204. Further, at the end of column 8 through column 9, Edem teaches "network end points would negotiate to communicate using the low power protocol when there was no or little communication traffic between the two end points." We find this communication to be both an eligibility and a capability determination, as claimed.

Edem further teaches the use of the IEEE P802.9a specification which defines protocols and mechanisms required to implement a remote line

powering scheme and defines an auto-negotiation scheme for configuring an interface between two network end points. We find this communication to be both an eligibility and a capability determination, as claimed. Appellants argue that first, there is the function of determining capability of both ends to enter a low power mode, and then if, and only if, both ends are capable of entering a low power mode, then determining if both ends are eligible to enter a low power mode. (App. Br. 4). Here, we find Appellants' argument goes beyond the express limitations recited in independent claims 1, 4, and 5. Therefore, Appellants' argument is not persuasive of the error in the Examiner's initial showing of anticipation.

With respect to dependent claims 2 and 6-8, Appellants argue that Edem does not show "*selectively* reducing portions of various devices to a low power mode." (App. Br. 4). The Examiner maintains that columns 10 and 11 of Edem teaches selectively detecting and controlling portions. (Answer 6). We agree with the Examiner that those portions of Edem clearly identify that portions of the circuitry are selectively modified for the variation in data transmission and power usage between the two power modes. Therefore, we find Appellants' argument unpersuasive and does not show error in the Examiner's initial showing of anticipation.

PRINCIPLES OF LAW

35 U.S.C. § 103(a)

Section 103 forbids issuance of a patent when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.”

KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1734 (2007).

In *KSR*, the Supreme Court emphasized "the need for caution in granting a patent based on the combination of elements found in the prior art," and discussed circumstances in which a patent might be determined to be obvious. *KSR*, 127 S. Ct. at 1739 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12 (1966)). The Court reaffirmed principles based on its precedent that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* The operative question in this "functional approach" is thus "whether the improvement is more than the predictable use of prior art elements according to their established functions." *Id.* at 1740.

The Federal Circuit recently recognized that "[a]n obviousness determination is not the result of a rigid formula disassociated from the consideration of the facts of a case. Indeed, the common sense of those skilled in the art demonstrates why some combinations would have been obvious where others would not." *Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (citing *KSR*, 127 S. Ct. at 1739). The Federal Circuit relied in part on the fact that Leapfrog had presented no evidence that the inclusion of a reader in the combined device was "uniquely challenging or difficult for one of ordinary skill in the art" or "represented an unobvious step over the prior art." *Id.* at 1162 (citing *KSR*, 127 S. Ct. at 1741).

One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

ISSUE

Have Appellants shown error in the Examiner's initial showing of obviousness of the combination of Edem in view of Hobson?

ANALYSIS

With respect to dependent claims 9-20, Appellants argue that the addition of the Hobson reference does not cure the asserted deficiencies in Edem and that the Hobson reference is not dealing with communications systems and thus the operation of the Hobson system is quite different from that of Appellants. (App. Br. 5-6). While we agree with Appellants that there are some differences in the end a use of the system of Hobson, we find that Appellants' arguments at pages 5-6 of the Brief do not address the merits of the Examiner's reliance upon Hobson for the asserted claimed features nor does Appellants' general commentary regarding Hobson show error in the Examiner's line of reasoning for the combination as asserted by the Examiner at pages 7- 8 of the Answer.

CONCLUSION

For the aforementioned reasons, Appellants have not shown that the Examiner erred in rejecting claims 1, 2, and 4-8 over Edem; and Appellants have not shown that that the Examiner erred in rejecting claims 9-20 over Edem in view of Hobson.

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Application 09/839,179

ORDER

We affirm the anticipation rejection of claims 1, 2, and 4-8 and the obviousness rejections of claims 9-20.

AFFIRMED

msc

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