

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* JERRY WALTER MALCOM

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Appeal 2007-1630  
Application 10/422,661  
Technology Center 2600

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Decided: October 24, 2007

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Before JOSEPH L. DIXON, ANITA PELLMAN GROSS, and  
ST. JOHN COURTENAY III, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-18. We have jurisdiction under 35 U.S.C. § 6(b). We AFFIRM.

## THE INVENTION

The disclosed invention generally relates to a method and system for controlling power consumption of battery-powered portable devices such as handheld computers, cordless telephones, cellular telephones, and specialized portable terminal devices (e.g., handheld bar coding equipment, portable point-of-sale devices, and the like) (Spec. 2). Upon detection of signal loss, the portable device enters a “smart nap” mode where the device stops searching for a network signal until a later time when the network signal is likely to be reliably available again. The duration of the “smart nap” mode is determined by searching “smart nap records” which store an accumulated history of signal conditions for the device (Spec. 17-18).

Independent claim 1 is illustrative:

1. A method for managing battery energy usage by a mobile wireless network device comprising:
  - determining that a period of signal intermittence has started by detecting threshold conditions for a transient network signal being intermittently found and intermittently lost;
  - recording events of said threshold conditions with operational criteria associated with operational conditions of the events;
  - upon each detection of network signal loss, determining from said event records a nap termination condition upon which network signal has been historically reliable following said period of signal intermittence; and
  - entering a nap mode until said nap termination condition is met, during said nap mode a state of lower power consumption being achieved including defeating searching for said network signal.

Appeal 2007-1630  
Application 10/422,661

#### THE REFERENCES

Pombo	US 5,799,256	Aug. 25, 1998
Croft	US 6,078,826	Jun. 20, 2000
Ariga	US 6,625,455 B1	Sep. 23, 2003 (filed Aug. 10, 1998)

#### THE REJECTIONS

1. Claims 1-3, 7-9, and 13-15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Pombo.
2. Claims 4, 5, 10, 11, 16, and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Pombo in view of Croft.
3. Claims 6, 12, and 18 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Pombo in view of Ariga.

Rather than repeat the arguments of Appellant or the Examiner, we make reference to the Briefs and the Answer for the respective details thereof. Arguments pointing out patentable subject matter which Appellant could have made but chose not to make have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(vii) (2005). *See also* *Optivus Tech., Inc. v. Ion Beam Applications S.A.*, 469 F.3d 978, 989 (Fed. Cir. 2006); *In re Watts*, 354 F.3d 1362, 1368 (Fed. Cir. 2004).

At the outset, we note that Appellant has used an incorrect application control number (10/442,661) on each page of the Brief and Reply Brief. The correct application control number for this appeal is 10/422,661. We consider this to be a typographical error. Because all incoming papers are routed within the PTO according to application control number, it is

Appeal 2007-1630  
Application 10/422,661

essential that Appellant use the correct application control number in any subsequent communications regarding this appeal.

#### PRINCIPLES OF LAW

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.*, 432 F.3d 1368, 1375-76 (Fed. Cir. 2005) (citation omitted). “Anticipation of a patent claim requires a finding that the claim at issue ‘reads on’ a prior art reference.” *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1346 (Fed Cir. 1999) (“In other words, if granting patent protection on the disputed claim would allow the patentee to exclude the public from practicing the prior art, then that claim is anticipated, regardless of whether it also covers subject matter not in the prior art.”) (citations omitted).

#### ANALYSIS

Claims 1-3, 7-9, and 13-15

We consider first the Examiner’s rejection of claims 1-3, 7-9, and 13-15 as being anticipated by Pombo. Since Appellant’s arguments have treated these claims as a single group which stand or fall together, we will select independent claim 1 as the representative claim. *See* 37 C.F.R. § 41.37(c)(1)(vii)(2005).

Appellant presents four principal arguments:

1) Pombo's sleep mode is entered into only if the mobile handset is already locked into a base station and not upon loss of signal, as claimed (App. Br. 4).

2) In order for Pombo's system to be locked into a base station, the same base station has to be connected to the handset for 10 minutes, at which time a sleep period is calculated (*Id.*).

3) Pombo's system does not go into a sleep mode if contact with a base station is lost (App. Br. 4-5).

4) Pombo does not disclose determining the transience of the signal, i.e., the length of time of finding a signal and the length of time of losing a signal, and then calculating a sleep period (App. Br. 5-6).

Regarding Appellant's first argument (i.e., that Pombo's sleep mode is entered into only if the mobile handset is already locked into a base station and not upon loss of signal, as claimed), the Examiner disagrees, and cites to column 11, lines 3-11 of Pombo as disclosing sleep mode adjustments "when the same base station control channel 'was not detected within the last ten minutes'" (Ans. 9). However, as noted by Appellant (Reply Br. 1-3), Pombo requires two conditions to be true prior to performing a sleep mode calculation. The search period must be 10 seconds and the same control channel must have been detected within the last 10 minutes (col. 11, ll. 3-11; fig. 6). Therefore, we agree with Appellant that Pombo's sleep mode, as shown in block 614 of Fig. 6, is entered into only if the mobile handset is locked into a base station. Nevertheless, we find Appellant's claimed "nap mode" broadly but reasonably reads on another portion of Pombo, as discussed *infra*.

Regarding Appellant's second argument (i.e., that in order for Pombo's system to be locked into a base station, the same base station has to be connected to the handset for 10 minutes, at which time a sleep period is calculated), the Examiner disagrees, and again points to column 11, lines 3-12 of Pombo in support of the assertion that the sleep period is calculated "when the same control channel was NOT detected within the last ten minutes." (Ans. 9-10). As discussed *supra*, we agree with Appellant (App. Br. 4) that Pombo's sleep period is not calculated unless the current search period is every 10 seconds and the same control channel was detected within the last 10 minutes, as shown in decision block 608 of Pombo's Fig. 6. Nevertheless, we find Appellant's claimed "nap mode" broadly but reasonably reads on another portion of Pombo, as discussed *infra*.

Regarding Appellant's third argument (i.e., that Pombo's system does not go into a sleep mode if contact with a base station is lost), the Examiner disagrees, and again points to column 11, lines 3-11 of Pombo as describing how the sleep period is calculated when contact with a base station is lost (Ans. 10). As discussed *supra*, we agree with Appellant that the sleep mode shown in Pombo's block 614 (Fig. 6) is entered into only when the mobile handset is locked into a base station.

However, as noted by Appellant (App. Br. 4-5), Pombo also discloses a "no control activity" process, which calculates a dramatically increased search period when no control channel has been detected (col. 11, ll. 27-62). We note that Appellant's claimed "nap mode" is broadly recited in terms of "entering a nap mode until said nap termination condition is met, during said nap mode a state of *lower power consumption* being achieved including

Appeal 2007-1630  
Application 10/422,661

defeating searching for said network signal [emphasis added].” (Claim 1). After carefully examining the record before us, we find Appellant acknowledges in the Brief that Pombo’s “no control activity” process will result in a state of *lower power consumption* and will defeat searching for the calculated time interval, as follows:

There is no mention of entering “sleep mode” during this period, only of delaying the next search until the next search time, *which would save some battery power*, but not as much as going into “sleep mode.”

(App. Br. 5, ¶1).

In particular, we note that *a particular degree or amount of battery power saving is not claimed*. Thus, we find the portion of Pombo, at column 11, lines 27-62, discloses calculating a nap termination condition upon each detection of network signal loss (i.e., a determination is made that no control channel was detected, col. 11, l. 29), and entering a nap mode (i.e., a battery saving mode) until the nap termination condition is met, as required by the language of representative claim 1. Thus, while we agree with Appellant that Pombo’s sleep mode, as shown in block 614 of Fig. 6, is not entered into upon each detection of network signal loss, we nevertheless find that Pombo also discloses a “no control activity” process (col. 11, l. 41) which results in a period of reduced power consumption and suspended searching, that is entered upon each detection of network signal loss (*See Pombo*, col. 11, ll. 41-45).

Regarding Appellant’s fourth argument (i.e., that Pombo does not disclose the length of time of finding a signal and the length of time of

Appeal 2007-1630  
Application 10/422,661

losing a signal), the Examiner disagrees, noting that Appellant has not claimed any time period determination (Ans. 10-11).

We note that Appellant specifically argues in the Brief:

It should be noted, as well, that nowhere in these passages of Pombo's disclosure are any processes described which would amount to "determination of the length of time of finding a signal" and [the] "length of time of losing a signal", using Appellant's analogous *argued description or interpretation* [emphasis added].

(App. Br. 7, ¶2)

We note that patentability is based upon the claims. "It is the claims that measure the invention." *SRI Int'l v. Matsushita Elec. Corp. of America*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (*en banc*). Limitations appearing in the specification but not recited in the claim are not read into the claim. *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369 (Fed. Cir. 2003) (claims must be interpreted "in view of the specification" without importing limitations from the specification into the claims unnecessarily).

Here, we agree with the Examiner, and find the claims do not require determination of a length of time of finding or losing a signal, as argued by Appellant. Instead, the representative claim broadly recites: "determining that a period of signal intermittence *has started* by detecting *threshold conditions* for a transient network signal being *intermittently found* and *intermittently lost* [emphasis added];" (Claim 1). Thus, we find this portion of the claim broadly but reasonably reads on Pombo's detection of each control channel signal from a particular base station, since each control channel signal is intermittent, and Pombo records the time it was initially detected in the control activity table (col. 5, ll. 34-38; col. 6, ll. 31-35).

We find representative claim 1 broadly but reasonably reads on the Pombo reference, as follows:

Claim 1	Pombo
A method for managing battery energy usage by a mobile wireless network device comprising:	We find Pombo discloses a method for reducing power consumption in a portable, battery powered, communication device ( <i>See Abstract</i> ).
determining that a period of signal intermittence has started by detecting threshold conditions for a transient network signal being intermittently found and intermittently lost;	We find Pombo discloses detection of transient control channels that are intermittently found and intermittently lost (col. 5, ll. 34-38; col. 6, ll. 31-35).
recording events of said threshold conditions with operational criteria associated with operational conditions of the events;	We find Pombo discloses recording events of threshold conditions (signal detection) with operational criteria (i.e., the time when the signal was detected) in the control activity table (col. 5, ll. 34-38; col. 6, ll. 31-41; col. 12, ll. 13-28 and 56-67).
upon each detection of network signal loss	We find Pombo discloses detection of loss of a control channel (col. 11, ll. 28-31).
determining from said event records a nap termination condition	We find Pombo discloses determination of a nap termination condition (next control time) from data maintained in the control activity table (col. 11, ll. 53-55).
upon which network signal has been historically reliable following said period of signal intermittence	We find Pombo discloses that the next control time is the time when the control signal has been historically reliable (i.e., available), as stored in the activity table in memory 117 (col. 11, ll. 53-59).

entering a nap mode until said nap termination condition is met, during said nap mode a state of lower power consumption being achieved including defeating searching for said network signal.	We find that searching is halted until the “next control time,” (col. 11, ll. 53-59) resulting in reduced power consumption ( <i>See also</i> col. 11, ll. 27-62).
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Because we find Pombo discloses all that is claimed, we conclude the Examiner has met the burden of presenting a prima facie case of anticipation and that Appellant has failed to show error in the Examiner’s prima facie case. Accordingly, we will sustain the Examiner’s rejection of representative claim 1 as being anticipated by Pombo.

Pursuant to 37 C.F.R. § 41.37(c)(1)(vii), we have decided the appeal with respect to the remaining claims in this group on the basis of the selected claim alone. Therefore, we will sustain the Examiner’s rejection of claims 2-3, 7-9, and 13-15 as being anticipated by Pombo for the same reasons discussed *supra* with respect to representative claim 1.

Claims 4, 5, 10, 11, 16, and 17

We note that Appellant has presented no arguments directed to the combinability of Pombo and Croft with each other. Accordingly, Appellant has waived any such arguments, and the combinability of the references will not be addressed here.

Appellant argues that Croft does not overcome the deficiencies of Pombo, in that Croft is silent with respect to the handling of transient or intermittent signals, as claimed (App. Br. 8).

Appeal 2007-1630  
Application 10/422,661

In response, we find no deficiencies with Pombo, as discussed *supra* with respect to claim 1. Thus, Appellant has not presented any substantive arguments directed to the separate patentability of dependent claims 4, 5, 10, 11, 16, and 17. In the absence of a separate argument with respect to the dependent claims, those claims stand or fall with the representative independent claims. *See In re Young*, 927 F.2d 588, 590 (Fed. Cir. 1991). *See also* 37 C.F.R. § 41.37(c)(1)(vii)(2005). Therefore, we sustain the Examiner's rejection of these claims as being unpatentable over Pombo in view of Croft for the same reasons discussed *supra* with respect to independent claim 1.

#### Claims 6, 12, and 18

We note that Appellant has presented no arguments directed to the combinability of Pombo and Ariga with each other. Accordingly, Appellant has waived any such arguments, and the combinability of the references will not be addressed here. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2005).

Appellant argues that Ariga does not overcome the deficiencies of Pombo, in that Ariga is silent with respect to the handling of transient or intermittent signals, as claimed (App. Br. 8).

In response, we find no deficiencies with Pombo, as discussed *supra* with respect to claim 1. Thus, Appellant has not presented any substantive arguments directed to the separate patentability of dependent claims 6, 12, and 18. Therefore, we sustain the Examiner's rejection of these claims as being unpatentable over Pombo in view of Ariga for the same reasons discussed *supra* with respect to independent claim 1.

Appeal 2007-1630  
Application 10/422,661

DECISION

Based on the findings of facts and analysis above, we conclude that the Examiner did not err in rejecting claims 1-3, 7-9, and 13-15 under § 102(b) for anticipation and claims 4-6, 10-12, and 16-18 under § 103(a) for obviousness. Therefore, the decision of the Examiner rejecting claims 1-18 is affirmed.

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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