

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* MARK J. JOHNSON, MATTHEW R. PERKINS,  
ROBERT J. O'DEA, TIMOTHY J. BANCROFT,  
MARK A. KRIZIK, and NEAL K. PATWARI

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Appeal 2008-1446  
Application 10/145,257  
Technology Center 2600

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Decided: September 29, 2008

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Before KENNETH W. HAIRSTON, MAHSHID D. SAADAT, and KARL  
D. EASTHOM, *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from a final rejection of claims 1 to 8. We have jurisdiction under 35 U.S.C. § 6(b).

We will sustain the rejections.

Appellants have invented a method of inferring a set of characteristics of a confined environment via a travel path of a device in the confined environment (Figs. 2 and 5; Spec. 1, 9, and 10).

Claim 1 is the only independent claim on appeal, and it reads as follows:

1. A method of inferring a set of characteristics of an environment comprising the steps of:

obtaining at least a first location estimate of a first device at a first time and a second location estimate of the first device at a second time;

establishing a first path traveled by the first device based on at least the first location estimate of the first device at the first time and the second location estimate of the first device at the second time; and

inferring a map of a confined environment having at least one wall based on the first path traveled by the first device, wherein the environment is other than predetermined map data.

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

Ronzani	US 6,683,584 B2	Jan. 27, 2004 (effective filing date Oct. 21, 1994)
Saitta	US 6,898,559 B2	May 24, 2005 (filed Dec. 8, 2000)

The Examiner rejected claims 1 to 3, 5, 7, and 8 under 35 U.S.C. § 103(a) based upon the teachings of Saitta.

The Examiner rejected claims 4 and 6 under 35 U.S.C. § 103(a) based upon the teachings of Saitta and Ronzani.

#### ISSUE

Appellants contend that “Saitta does not infer a map of a confined environment (e.g., the building) based on a path traveled by a device (e.g., the tracking module) as is recited in Claim 1” because “Saitta uses a much different technique to provide for the ‘accurate’ mapping of the building”

(App. Br. 6). Thus, the issue before us is whether or not the Examiner has demonstrated that the building mapping technique described by Saitta includes “inferring a map of a confined environment” based on a path traveled by a device as set forth in claim 1 on appeal?

#### FINDINGS OF FACT

1. The left half of Figure 2 of Appellants’ drawing shows an office building that is being traversed by users outfitted with wireless communication devices to compile location information in order to produce a rendering of all traveled routes. The right half of Figure 2 shows a display of the traveled routes. From the traveled routes by the users and the devices, Appellants’ invention infers a map of the confined environment.

2. Saitta describes a system for automatically mapping the rooms of a building as a user traverses the rooms to thereby create a virtual map of the movements of the users through the building (Figs. 1 and 3; Abstract). A tracker module 101 carried by the user traversing room 302 transmits acoustic signals that are bounced off the walls of the confined environment in the room, and a processor 118 in the tracker module uses the transmit time of the acoustic signals to compute the dimensions of the room that the user is located in (col. 5, ll. 42 to 63). A command module 103 correlates the data received from a plurality of tracker modules 101 and 102 to produce a virtual map of the building as the users move throughout the rooms of the building with their respective tracker modules (col. 6, ll. 26 to 33).

3. Ronzani was cited by the Examiner for a teaching of displaying a path of travel by a device (Ans. 4).

## PRINCIPLES OF LAW

The Examiner bears the initial burden of presenting a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). If that burden is met, then the burden shifts to the Appellants to overcome the prima facie case with argument and/or evidence. *See id.*

The Examiner's articulated reasoning in the rejection must possess a rational underpinning to support the legal conclusion of obviousness. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006).

## ANALYSIS

Appellants' arguments throughout the briefs that Saitta does not infer a map of a confined environment because an "accurate" map is produced by the automatic mapping technique used by Saitta is without merit because many different inferences (i.e., conclusions based upon evidence or premises) may be drawn from the technique used by Appellants as well as the technique used by Saitta. An inference that would have been patently obvious to the skilled artisan is that if Saitta's technique worked according to plan, then it is "accurate" as noted by Appellants. Stated differently, the skilled artisan can infer from Saitta's "accurate" technique "a map of a confined environment having at least one wall based on the first path traveled by the first device, wherein the environment is other than predetermined map data" as set forth in claim 1 on appeal.

In summary, we agree with the Examiner's reasoning that "Saitta teaches an inferred map of confined building environment, since data on wall positions, etc. is not directly measured for exact specifications" (Ans. 4). *See In re Kahn*, 441 F.3d at 988 (Fed. Cir. 2006). Appellants' arguments throughout the briefs do not convince us of any error in the Examiner's

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positions in the rejection of claim 1. *In re Oetiker*, 977 F.2d at 1445 (Fed. Cir. 1992).

#### CONCLUSION OF LAW

The Examiner has established the obviousness of claim 1. The Examiner has established the obviousness of claims 2 to 8 since Appellants have not presented any patentability arguments for these claims.

#### ORDER

The obviousness rejection of claims 1 to 8 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

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AFFIRMED

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