

NOTE: This disposition is nonprecedential

**United States Court of Appeals  
for the Federal Circuit**

---

(Reexamination No. 90/008,387)

**IN RE ALEKSANDR L. YUFA**

---

2011-1417

---

Appeal from the United States Patent and Trademark  
Office, Board of Patent Appeals and Interferences.

---

Decided: February 8, 2012

---

ALEKSANDR L. YUFA, of Colton, California, pro se.

RAYMOND T. CHEN, Solicitor, United States Patent  
and Trademark Office, of Alexandria, Virginia, for appel-  
lee. With him on the brief were FARHEENA Y. RASHEED  
and SYDNEY O. JOHNSON, JR., Associate Solicitors.

---

Before LOURIE, MOORE, and REYNA, *Circuit Judges*.

Per Curiam.

Aleksandr Yufa appeals the decision by the Board of  
Patent Appeals and Interferences (Board) in reexamina-  
tion 90/008,387 holding claims 1 and 3-5 invalid for

obviousness and claims 6-8 invalid for lack of written description. Because the Board correctly held that claims 1 and 3-5 would have been obvious, we *affirm* those rejections. Regarding claims 6-8, the U.S. Patent and Trademark Office (PTO) concedes that the written description rejections should be withdrawn by the Board and thus we *vacate* and *remand*.

#### BACKGROUND

This appeal arises from an ex parte reexamination of U.S. patent no. 6,346,983. The specification describes a system for detecting particles in an airborne gas or a liquid. J.A. 66 col.1 ll.5-10. The system includes a computer that controls a remote detection system by wirelessly sending activation commands. J.A. 70 col.9 ll.3-24. The remote detection system includes sensors to determine the amount of particles in a sample, means to analyze and process the signal from the sensors, and a wireless communication mechanism to transmit the results back to the computer. J.A. 68 col.6 ll.60-65; J.A. 70 col.10 ll.46-55. The computer converts and displays the results. J.A. 70 col.10 ll.60-65. Claim 1, amended during reexamination, is illustrative:

A method for counting and measuring particles illuminated by a light beam, providing two-way wireless communication between a data processing and control system and a remote particle detecting system, said method comprising the steps of:

...

sensing by a light detecting means of a particle detecting means of said remote particle detecting system a light created by an intersection of said light beam and said particles within a particle

monitoring region and providing an output, which is effectively indicative of a size of said particles;

processing said output by a signal processing system of said remote particle detecting system providing said measuring and said counting of said particles;

forming in said signal processing system of said remote particle detecting system a data, containing an information about a quantity and said size of said particles;

converting said data, containing said information about said quantity and said size of said particles to the form for wireless transmission;

wireless transmitting of the converted data, containing said information about said quantity and said size of said particles, from said remote particle detecting system to said data processing and control system;

....

The Board rejected claims 1, 3, and 4 under 35 U.S.C. § 103(a) based on a single reference, Japanese Unexamined Patent Application Publication No. H4-12248 (Mikami). Mikami discloses a system for measuring particle concentration in the air in a clean room. S.A. 612. The system includes a computer, measurement means, and FM radios for transmitting signals wirelessly. S.A. 615 Fig 1. The computer issues commands wirelessly to the measurement means instructing it to take measurements. S.A. 613. The measurement means detects particles and sends a raw signal back to the computer. *Id.* The computer then determines the “cumulative number of dust particles” using the data from the measurement means. *Id.* In its background section, Mikami describes prior art

robot-operated systems in which a single device included both sensor and signal processing systems to determine the amount of particles in a sample. S.A. 612.

The Board held that Mikami disclosed all of the limitations of claims 1, 3, and 4 except for “processing said output by a signal processing system of said remote particle detecting system” because Mikami performs this processing at the computer instead of the remote measurement means. S.A. 8. The Board found that the background disclosure in Mikami teaches this limitation because the robot-operated sensors included a detection system and processing means for determining the amount of particles. *Id.* The Board held that these disclosures rendered the claims obvious because the patent simply rearranged known elements. S.A. 9. Regarding claim 4, the Board held that Mikami discloses the claimed “tubular means,” “environmental assaying control means,” and “detection means” pointing to specific structures and functions in Mikami. S.A. 15-16. Regarding claim 5, which requires that each remote detection system have an identification code, the Board held that it would have been obvious over Mikami in view of U.S. patent no. 5,864,781 (White). White discloses sensors with unique ID codes. White Abstract; col.2 ll.27-33. Finally, the Board rejected claims 6-8 for lack of written description support under 35 U.S.C. § 112, ¶1.

The applicant appeals. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

#### DISCUSSION

Obviousness is a question of law that we review de novo. *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000). What a reference teaches and the motivation to combine are questions of fact. *Id.* at 1315-16; *Par Ordnance Mfg., Inc. v. SGS Importers Int’l, Inc.*, 73 F.3d

1085, 1088 (Fed. Cir. 1995). We uphold fact findings that are supported by substantial evidence. 5 U.S.C. § 706(2)(E)

We agree with the Board that claims 1 and 3 would have been obvious based on the disclosure of Mikami.<sup>1</sup> Mikami teaches every element of the claims except that the processing of the raw sensor data occurs at the computer in Mikami, but at the remote detecting system in the claims. For example, Mikami discloses measurement means positioned inside a clean room collecting data and sending this data wirelessly to a computer. S.A. 613. The computer processes this data to “[calculate] the cumulative number of dust particles.” *Id.* This is nothing more than a reconfiguration of a known system. We agree with the Board that this “simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such an arrangement.” *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 417 (2007).

The appellant argues that Mikami teaches away from the claimed invention citing a statement by an examiner that “Mikami taught that processing measurement data at the remote sensing location was possible, but preferred not to include the extra equipment at the remote location because it was quicker and more accurate to have most of the equipment outside of the location being measured.” Appellant’s Br. 9-10 (quoting S.A. 1728). Substantial evidence supports the Board’s factual finding that Mikami does not teach away from the claimed invention. Mikami is not concerned with the location of signal processing, rather, it addresses the issues associated with having a large apparatus in the clean room. S.A. 612 (“the space

---

<sup>1</sup> Claim 3 is an apparatus claim that is analogous to claim 1 and the analysis for each is identical.

required for the robot to move placed restraints on the actual operations”). Mikami simply criticizes larger systems, and does not specifically address whether the signal processing function could be moved from the computer to the remote measurement means. Thus, there is substantial evidence that Mikami does not teach away from the claimed invention.

The appellant’s arguments regarding secondary considerations of nonobviousness do not rebut this strong prima facie case. For example, the appellant presents, as evidence of unexpected results, many technical reasons that the claimed invention is more efficient than prior art systems. Appellant’s Br. 23-27; 60-61. But the appellant’s unsupported arguments do not amount to evidence of unexpected results that would rebut the prima facie case for obviousness. Appellant similarly argues that the invention enjoyed commercial success. The appellant made no substantive arguments regarding commercial success before the PTO except for the statement: “The Product . . . has a commercial success.” S.A. 1626. This conclusory statement was not supported by any evidence or even any additional argument. This is not sufficient to preserve the issue for appeal. We will not consider evidence of commercial success offered for the first time on appeal and not part of the record before the PTO. Therefore, we deem the argument regarding commercial success waived.

Regarding claim 4, substantial evidence supports the Board’s finding that Mikami discloses the claimed elements. The specification of the patent in reexamination provides very little description for the elements in question: “environmental assaying control means” and “tubular means.” The Board held that the function of the “environmental assaying control means” is to send an air sample to the detection means and the structure is box 41

of figure 6. S.A. 15-16. We agree that Mikami discloses this as the box structure surrounding laser beam 8 that moves an air sample from the air entry point near reference number 7 toward the photomultiplier 11 (which undisputedly corresponds to the detection means). Regarding the “tubular means,” the Board held that the function is to allow passage of the assayed air sample from the environmental assaying control means to the detection means and pointed to box 37 in figure 6 as corresponding structure. S.A. 15. The Board correctly held that chamber 9 in Mikami corresponds to this limitation because it moves air from the environmental assaying control means to the photomultiplier 11.

Regarding claim 5, substantial evidence supports the Board’s finding that White discloses the additional element of an identification code for the remote detecting system. *See White Abstract*; col.2 ll.27-33. We agree with the Board that the claim would have been obvious because a person of ordinary skill in the art would recognize the advantages of using identification codes to differentiate between multiple remote detection systems.

The Board also rejected claims 6-8 for lack of written description under 35 U.S.C. § 112 ¶1. The PTO concedes that these rejections are in error and “seeks remand to the Board for it to withdraw the written description rejection and take appropriate action.” Appellee’s Br. 26. The Appellant agrees. Reply Br. 37.

Because substantial evidence supports the Board’s fact findings and it correctly held that claims 1, 3, 4, and 5 would have been obvious under 35 U.S.C. § 103(a), we affirm those rejections. Because the PTO concedes the impropriety of the written description rejections of claims 6-8, we vacate and remand for the Board to withdraw those rejections and take appropriate action.

**AFFIRMED-IN-PART, VACATED-IN-PART, and  
REMANDED**

COSTS

No costs.