

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* DAVID ALUMOT, GAD NEUMANN,  
RIVKA SHERMAN, and EHUD TIROSH

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Appeal 2008-1145  
Application 10/852,996  
Technology Center 2600

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Decided: July 29, 2008

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Before KENNETH W. HAIRSTON, ROBERT E. NAPPI, and KARL D. EASTHOM, *Administrative Patent Judges*.

EASTHOM, *Administrative Patent Judge*.

**DECISION ON REQUEST FOR REHEARING**

**STATEMENT OF CASE**

Appellants request a rehearing pursuant to 37 C.F.R. § 41.52 of our Decision on Appeal (“Decision”) of May 27, 2008 affirming the Examiner’s rejection of claims 96-99, 101-109, 111-122, 124-127, 129-134, 136, and 139-155.

We deny the request, insofar as it seeks a modification of our decision, for the reasons that follow.

Appellants' arguments do not focus on any particular claim. We choose claim 96 as representative of the claims.

## ANALYSIS

Appellants' main contention boils down an argument that since the IBMTDB teaches pulsed lights and non-pulsed rotating lights, it would not have been obvious to employ the pulsed lights in Levy's '203 system:

The Board concludes that IBMTDB describes numerous benefits that must be attributed to the use of a pulsating light source in general because each lamp is pulsed and the light only appears to rotate around the test object. (Decision at 5) However, all benefits in IBMTDB are also taught to be achieved by using a single lamp that remains illuminated while rotating around the test object. The actual teaching of IBMTDB is to improve inspection by rotating the light around a test object, and the limited teaching is not extendible to make obvious pulsing of the stationary light source in Levy '203.

The Board's finding that the light in IBMTDB pulses and only appears to rotate ignores the teaching in IBMTDB that actual rotation of one non-pulsed light source provides all of the asserted benefits. The Board erroneously attributes the benefits to pulsing of each light source instead of rotating the light source.

(Reh'g 2).

Assuming arguendo that Appellants are correct that all the IBMTDB system benefits are attributable to a rotating light, this does not defeat our finding that the IBMTDB teaches that such benefits are attributed also to pulsing lights that appear to rotate. Moreover, we found that such pulsating lights were well known to produce such beneficial results of better yield,

contrast and scattering in wafer detection systems. (Decision 8).<sup>1</sup> Further, since a series of pulsed lights that appear to rotate based on the timing of the pulses requires no moving parts, while, on the other hand, a non-pulsed rotating light requires mechanical moving parts, one of skill in the wafer inspection arts would have appreciated the benefits of the nonmoving pulsed light system. In other words, all of the benefits of rotating are obtained by pulsing the lights so that they appear to rotate without actually doing so, as the IBMTDB makes clear.

As we noted in our Decision at page 7, the Supreme Court recently stated 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.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1739 (2007). In *KSR*, the Supreme Court recognized that replacing mechanical parts with electronic parts yielded predictable and obvious results. We make a similar finding here.

Appellants also argue: “Furthermore, there is no assertion in the record that it would be obvious to replace the stationary light source in Levy ‘203 with a circular array of sequenced lights, or that the rejected claims would not be patentable in view of such an assertion.” (Reh’g 2). We disagree.

We specifically described such a circular array of lights, reasoning “the light only appears to rotate – it pulsates or strobos via a sequential

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<sup>1</sup> We also found “that Levy teaches and fairly suggests the use of a pulsed light source in wafer inspection systems” (Decision 8, n. 9) which Appellants do not challenge.

illumination of *successive lights in a circle* (IBMTDB, p. 2285, Fig. 2).” (Decision 5, emphasis added). We also concurred with the Examiner’s findings, and rendered our own similar findings supporting our determination that the IBMTDB strobe light system would have been obvious as a replacement for Levy’s system (*see generally* Decision 5-10). For example, we quoted the Examiner: stating ““using a strobe light source in place of the light source of Levy can result in better yield in the wafer inspection’ (Ans. 13).” (Decision 5). We also summarized:

We summarize as follows. “Common sense teaches . . . that familiar items may have obvious uses beyond their primary purposes, and in many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.” *KSR*, 127 S.Ct. at 1742. We find the *KSR* description apt here. There is no dispute, as the Examiner generally found, that Lin’s two-dimensional array and the IBMTDB pulsed light were “familiar items” commonly employed for their “primary purposes” - wafer detection. Moreover, just as “[t]echnological developments made it clear that engines using computer-controlled throttles would become standard,” *KSR*, 127 S.Ct. at 1744, Levy makes it clear that automatic wafer detection systems would replace manual systems, thereby rendering even more predictable the improvements rendered by *employing the IBMTDB’s pulsed light sub-system in Levy’s automatic wafer detection system, such predictable improvements including better contrast, scattering integration, and yields.*

(Decision 9-10) (emphasis added).

Hence, our decision encompassed employing the IBMTDB pulsed lights, including the circular array of pulsed sequenced lights, as a replacement for Levy 203’s stationary lights, contrary to Appellants’ statements.

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Accordingly, Appellants have not demonstrated a basis upon which to modify our decision.

#### DECISION

The Request for Rehearing to the extent it seeks a modification of our decision is denied.

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).

REHEARING  
DENIED

gvw

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