

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HUM INDUSTRIAL TECHNOLOGY, INC.
Petitioner

v.

AMSTED RAIL COMPANY, INC.
Patent Owner

Case IPR2023-00539
US Patent No. 9,981,673

Before JAMES P. CALVE, KEVIN W. CHERRY, and MICHAEL L. WOODS,
Administrative Patent Judges.

**PETITIONER'S REPLY TO PATENT OWNER'S
PRELIMINARY RESPONSE**

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Statutes

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I. The Board Frequently Declines To Exercise Its Discretion To Deny Institution Under § 325(d) When A Reference Is Only Cited In An IDS

Petitioner does not dispute that “[p]reviously presented art includes ... art provided to the Office by an applicant, such as on an Information Disclosure Statement (IDS).” *Advanced Bionics LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 at 7-8 (PTAB Feb 13, 2020). Petitioner, however, disputes this warrants denial of institution under § 325(d) when, as is the case here with respect to LeFebvre and Armitage, there is no evidence in the prosecution history of the extent to which the examiner considered the references, that the examiner applied the references against the claims, or that the examiner considered the particular disclosures of the references presented in a petition. *See, e.g., Vizio, Inc. v. Nichia Corp.*, IPR2017-00551, Paper 9 at 7–8 (PTAB July 7, 2017).

“The Board frequently holds that a reference that ‘was neither applied against the claims nor discussed by the Examiner’ does not weigh in favor of exercising the Board’s discretion under § 325(d) to deny a petition.” *Amazon.com, Inc. v. M2M Sols. LLC*, IPR2019-01204, Paper 14 at 16 (PTAB. Jan. 23, 2020); *see also Apotex Inc. v. UCB Biopharma SPRL*, IPR2019-00400, Paper 17 at 25 (PTAB July 15, 2019). “When a reference was not the basis of rejection, the Board has found that this weighs ‘strongly against exercising our discretion to deny institution.’” *Cisco Sys., Inc. v. Ramot at Tel Aviv Univ., Ltd.*, IPR2022-01283, Paper 12 at 13-14 (PTAB

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Feb. 22, 2023) (quoting *CODE200, UAB et al. v. Bright Data Ltd.*, IPR2022-00353, Paper 8 at 10 (PTAB July 1, 2022)).

None of the cases cited by Patent Owner stand for the proposition that the Board will exercise its discretion under § 325(d) merely because a reference was cited in an IDS. Rather, the Board considered the prior art and arguments under the *Advanced Bionics* framework and the *Becton Dickinson* factors. *See, e.g., Palo Alto Networks, Inc. v. Centripetal Networks, Inc.*, IPR2021-01156, Paper 10 at 10-16 (PTAB Jan. 24, 2022) (reference considered in IPRs of grandparent and great grandparent and no material error by Examiner); *Microsoft Corp. v. Koninklijke Philips N.V.*, IPR2018-00279, Paper 11 at 14-15 (PTAB June 8, 2018) (reference used in rejection of related patent claims and challenged patent subject to terminal disclaimer over related patent); *Fellowes, Inc. v. Treefrog Devs., Inc.*, IPR2020-01509, Paper 11 at 17 (PTAB Feb. 22, 2021) (finding “significant weaknesses, in many, if not all, of the proposed grounds”); *BMW of N. Am., LLC v. Stragent, LLC*, IPR2021-00419, Paper 14 at 15 (PTAB July 19, 2021) (record indicated greater degree of consideration than where reference is “merely listed on an IDS.”).

II. The Petition Presents New Prior Art And Arguments Not Previously Considered By The Examiner

In the sole Office Action issued during prosecution, the Examiner rejected all claims over Searle in view of Baker. EX1002 at 108. In contrast, the Petition relies on LeFebvre *alone* to disclose all limitations of independent claims 1, 10, 14, and 21

and on Armitage *alone* to disclose all limitations of claims 1 and 10. A single reference argument is not “substantially the same” as a multiple-reference combination. *See Samsung Elecs. Co., Ltd. v. Collect, LLC*, IPR2020-00477, Paper 14 at 15 (PTAB Aug. 5, 2020).

In any event, LeFebvre and Armitage do not contain substantially the same disclosure as Searle or Baker. For example, claim 37 of the ’018 Application (issued as independent claim 1) was allowed because the Examiner found Searle and Baker “fail[] to explicitly teach a control method applying a heuristic to said received data to determine deviations from nominal operating conditions.” EX1002 at 493–494.¹ The portion of Searle cited by the Examiner describes a simple threshold-based analysis: “[i]f the filtered temperature exceeds the prescribed alarm level an alarm is triggered.” EX1002 at 109. In contrast, the systems disclosed by LeFebvre and Armitage do not merely compare a measured value against a fixed threshold. Instead, as set forth in the Petition, LeFebvre describes a “distributed inference engine” that applies heuristics to determine if an alarm should be raised (Paper 1 at 21–22) and Armitage discloses several heuristic techniques (e.g., trend modeling and statistical analysis) to identify deviations from nominal operating conditions (*id.* at 56–57).

¹ The remaining limitations of claim 1 depend from the “heuristics” limitation and are necessarily absent from Searle and Baker.

With respect to the remaining independent claims 47, 51, and 58 of the '018 Application, the basis for allowance is unclear. The Notice of Allowance distinguished the cited references on the basis of limitations *that only appear in independent claim 1*. See EX1002 at 493–494. To the extent the Examiner had a basis for allowing claims 47, 51, and 58 over the combination of Searle and Baker, it was never indicated on the record.²

For example, with respect to claim 47 of the '018 Application (issued as claim 10), Patent Owner argued Searle and Baker fail to disclose or suggest “sensing the temperature of a part of the railcar other than the desired part by use of a temperature sensor in thermal communication with said other part” and “determining the temperature of the desired part by use of the temperature sensed in step (a).” EX1002 at 428. This argument was not addressed in the Notice of Allowance, and it is not clear which (if any) of these features the Examiner considered absent from Searle and/or Baker. LeFebvre, however, expressly discloses measuring the temperature of a wheel bearing adapter, which can be used to infer the temperature of the wheel bearing itself. See Paper 1 at 28–30. Petitioner has also presented expert testimony

² The Notice of Allowance states “Applicant’s amendments with respect to claims 37–45 and 47–59 have been fully considered and are persuasive.” EX1002 at 493. But only claim 50 was amended in response to the Office Action. *Id.* at 424.

not before the Examiner to explain why a PHOSITA would have been motivated to attach a temperature sensor to a stationary component adjacent to a wheel bearing, rather than to a wheel bearing itself. *Id.* at 28–30, 65–66.

The limitations of claim 51 of the '018 Application (issued as claim 14) *were never addressed by the Examiner at all*. The Office Action addressed claims 37 and 51 together, despite the significant differences in claim language. EX1002 at 108–110. *See also* EX1002 at 429–430 (identifying claim 51 limitations not addressed in Office Action). The record does not indicate which features of claim 51 the Examiner found absent in Searle and/or Baker and it is unclear whether the Examiner appreciated the differences between claims 37 and 51.

With respect to claim 58 of the '018 Application (issued as claim 21), the Examiner initially relied upon Baker for limitations (a) and (b) and upon Searle for limitation (c). EX1002 at 117–118. Patent Owner then argued Searle failed to disclose limitation (c): “analyzing said collected data by applying heuristics thereto to (i) determine if an actual failure exists and (ii) to predict potential or imminent failures based on a statistical analysis of said collected data.” EX1002 at 432. Again, this argument was not addressed in the Notice of Allowance, and it is not clear which (if any) of these features the Examiner found lacking. In any event, as discussed above, LeFebvre and Armitage disclose the claimed heuristic techniques.

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CERTIFICATE OF SERVICE

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