

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Chemtronics USA, Inc.
Petitioner,

v.

FlatFrog Laboratories AB
Patent Owner

IPR2024-00014
Patent 11,281,335

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

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I. INTRODUCTION

Patent Owner ("PO") does not challenge the substance of Chemtronics's arguments, but instead spends nearly 50 pages manufacturing procedural defects and arguing for discretionary denial under 35 U.S.C. § 325(d). These arguments are meritless. Chemtronics's Petition presents new combinations of references and new arguments not previously considered by the Office. Thus, the Board should decline Patent Owner's request for discretionary denial under § 325(d).

II. NO BASIS EXISTS FOR DISCRETIONARY DENIAL BASED ON GROUNDS 1, 2, OR 3 UNDER 35 U.S.C. § 325 (d)**A. Grounds 1-3 Assert New, Non-Cumulative Prior Art Not Previously Presented Or Considered By The Office**

PO argues that part one of the *Advanced Bionics* test is satisfied because "Petitioner's 'key reference'¹ ... (Han) was previously considered by the Office," and "... Cao, Zhao, and Shin were also previously considered by the Office." POPR at 31, 38. PO is wrong for multiple reasons.

First, PO ignores that Grounds 1 and 3 include Cheng, a new reference not previously presented or considered by the Office. Further, for Grounds 1-3, PO hangs its hat on mere IDS disclosures of the Han, Cao, Shin, and Zhao references to argue they were "considered" by the Office. PO's arguments are not persuasive.

¹ PO invents Han's allegedly "key reference" description. For each Ground in the Petition, Han is but one reference among a combination of others.

1. Cheng Is A New, Non-Cumulative Reference

A single new, non-cumulative reference, regardless of if presented in combination with references discussed during prosecution or not, is enough to decline a § 325(d) denial. *Oticon Medical AB v. Cochlear Ltd.*, IPR2019-00975, Paper 15 at 19-20 (PTAB Oct. 16, 2019). PO fails to acknowledge that Cheng is new a reference and further fails to identify any substantive argument for why Cheng would be cumulative of any previously considered reference. Indeed, Cheng discloses entirely new structures not present in the prior art considered during prosecution and which are directly relevant to the unpatentability of the '335 Patent's claims.

For example, PO attempts to compare Cheng to an Office Action cited reference, Kukulj, alleging that both references similarly disclose “a touch screen device with a frame assembly having multiple edges and supporting a display panel. POPR at 25, 45 (citing Ex. 1013 at 632-34). But PO's comparison oversimplifies Cheng. Cheng discloses a frame assembly comprising structural elements that are both i) directly relevant to the unpatentability of the '335 Patent's claims and ii) entirely absent from Kukulj. *See* Petition at 25, 42-48; Ex. 1004; Ex. 1031, claim 1 (identifying specific frame element configuration limitations). In fact, Cheng's frame configuration discloses many of the very limitations cited in the Examiner's “Allowable Subject Matter.” Ex. 1032 at 27. Specifically, the Examiner included the following frame limitations in his reasons for allowance: “...the second frame element includes a first surface portion extending over an edge portion of the plate and a

second surface portion arrange substantially parallel to a surfaced of the plate that defines the plate thickness...” *Id.* These are the precise limitations Cheng discloses, but Kukulj did not. Simply put, Cheng provides “different structures that serve different purposes” compared to Kukulj’s disclosure or any other reference substantively considered by the Office. *Oticon Medical*, Paper 15 at 10-20.

2. Han, Cao, Shin, and Zhao Were Not Substantively Considered By The Office

Han, Cao, Shin, and Zhao’s inclusion in an IDS does not support discretionary denial. Han, Cao, Shin, and Zhao were buried beneath a mountain of 810 total documents that appear on the face of the ’335 patent. Ex. 1032 at 76. Despite their clear disclosure of the limitations of the ’335 patent claims, none of Han, Cao, Shin, or Zhao was ever mentioned during prosecution.

The mere recitation of a reference in an IDS does not evidence substantive consideration by an Examiner and does not provide a rationale for the Board to exercise discretionary denial. See *Satco Products Inc. v. The Regents of the Univ. of California*, IPR2021-00662, Paper 13 at 25 (PTAB Nov. 8, 2021); *Samsung Electronics Co., Ltd., et al. v. Evolved Wireless LLC*, IPR2021-00943, Paper 9 at 11-12 (PTAB Dec. 1, 2021); *Carrier Fire & Security America’s Corp. v. Sentrilock, LLC*, IPR2021-00664, Paper 12 at 21-23 (PTAB Sept. 16, 2021). Relying on certain references buried in a ledger of other references and legal paperwork does not support a discretionary denial of institution especially where, as in this case, none of the

references relied upon in the Petition were “used in any rejections, or otherwise addressed by the examiner.” *Scientific Design. Co. Inc. v. Shell Oil Co.*, IPR2022-00158, Paper 7 at 24-26 (PTAB Apr. 4, 2022) (declining to exercise discretion under § 325(d) and “credit[ing] Petitioner’s argument that although the references ‘were cited in an IDS, together with 111 references, none of them was used in any rejections, or otherwise addressed by the examiner.’”).

Nonetheless, PO attempts to argue that Han, Cao, Shin, and Zhao were considered by the Examiner simply because they were included in an IDS. POPR at 30. But that is insufficient to show that the Office substantively considered each reference in examining the claims. *See Satco Products*, Paper 13 at 25. Here, Han, Cao, Shin, and Zhao were buried in a single IDS containing 129 additional references (Ex. 1032 at 76-82). The Examiner’s boilerplate “all references considered” stamp of this IDS does not establish substantive consideration of these references.

PO points to Han, Cao, Shin, and Zhao’s inclusion in invalidity contentions (PO’s Ex. 2001, 2002) and claim charts (included in the same lengthy IDS) as evidence of the Office’s consideration. POPR at 21-23. But, again, PO’s cited claim charts and contentions examples were buried among a myriad of other references and were not specifically notated by the Examiner. Furthermore, PO’s cited claim chart and invalidity contentions related to a different patent (U.S. Patent No. 10,775,935) with different claim limitations. *Compare* Exs. 2001, 2002 (relating to the ’935

Patent) *with* Ex. 1031 (the '335 Patent). This is insufficient to show that the Examiner substantively considered each Han, Cao, Shin, and Zhao reference, *much less* the *combinations of those references* presented in the Petition. As such, the citation of these invalidity contentions does not warrant discretionary denial. *See Roofr Inc. v. Pictometry Inter. Corp.*, IPR2023-00435, Paper 16 at 6 (PTAB July 21, 2023) (“it is not enough ... that Patent owner overcame the same or substantively similar art or arguments *for materially different claims* in different patent applications.”).

The absence of Han, Cao, Shin, and Zhao from any Office Action is further telling that the Examiner failed to adequately consider those references. As evidenced by the arguments supporting the Petition's Grounds and the testimony of Dr. Cairns, a substantive consideration of Han, Cao, Zhao, and Shin by the Examiner should have resulted in an Office Action citing those references. *See generally* Petition; Ex. 1033. Despite Han, Cao, Zhao, and Shin's clear disclosure of the '335 claimed subject matter, none of those references were cited in any Office Action.

B. Grounds 1 And 3 Present New, Non-Cumulative Arguments Not Considered By The Office Because They Include Cheng

As discussed above, Cheng was never presented to or considered by the Office and is non-cumulative compared to the Examiner's considered references. This alone warrants against discretionary denial as even a single non-cumulative reference in combination with references discussed during prosecution is sufficient to avoid a §325(d) denial. *Oticon Medical*, Paper 15 at 16, 19-20. As described above and in

the Petition, Cheng discloses the “first surface portion extending over an edge portion of the plate and a second surface portion arranged substantially parallel to a surface of the plate that defines the plate thickness” which was expressly noted as a reason for allowance over the considered prior art. *See* Petition at Section V.B.1, D.1; Ex. 1032 at 27. Thus, Cheng's presence in Grounds 1 and 3 presents new, non-cumulative arguments and prevents PO from satisfying step one of the *Advanced Bionics* test and warrants against discretionary denial under § 325.

C. Grounds 1, 2, And 3 Further Present New, Non-Cumulative Arguments Not Considered By The Office

PO argues that Grounds 1-3 embody the “same” arguments previously considered by the Examiner. POPR at 43. But PO relies on a convoluted analysis to support this conclusion. The Petition's references in Grounds 1-3 are significantly different from the references cited during prosecution and disclose the very subject matter PO added to its claims to overcome the Examiner's cited references (the same references PO now offers as the “same” as Ground 1-3's current references). Each of PO's arguments suggesting Grounds 1-3 references embody cumulative arguments is wrong.

First, Grounds 1-3 present new arguments compared to the Examiner's previously considered Wassvik-Kukulj combination. A review of the prosecution

history shows Wassvik² was cited in combination with Kukulj only to reject *dependent claims* relating to “total internal reflection.” *E.g.*, Ex. 1032 at 637. Wassvik was not used to supplement Kukulj with its “alleged teachings of a touch surface that is curved” as PO suggests. POPR at 45. Accordingly, PO fails to explain how Grounds 1-3's references present the same arguments as the Wassvik-Kukulj combination, given the Grounds' references in combination disclose the subject matter of the *independent* claim of the issued '335 Patent.

Second, Grounds 1-3 present new arguments compared with the Examiner's Northcott-Kukulj combination. Differing significantly from Han's multi-axis curved quadrilateral plate, the Northcott reference discloses a circular plate having hemispherical curvature. Ex. 1032 at 574; Ex. 1035 at Figs. 9-10. In response to the Examiner's rejection citing Northcott's hemispherical plate curvature, PO initiated an Examiner Interview from which the Examiner indicated that amending the claims to include “a distance between a first curved line drawn on the touch surface and a second straight line drawn on the second flat plane varies according to a concave curve

² Contrary to PO's suggestion (POPR at 45), Wassvik was applied as a primary reference in the “First Rejection,” not in combination with Kukulj. Ex. 1032 at 1037-1043. PO does not explain how any of the arguments in this First Rejection are the same or substantively similar to those advanced in the Petition.

function” *would overcome the Northcott rejection*. Ex. 1032 at 563. PO amended the claims accordingly. *Id.* at 556. As discussed in detail in the Petition, Han in combination with i) Zhao and Cheng, ii) Cao and Zhao, and iii) Cheng and Shin each disclose the proposed amendment which Northcott and Kukulj did not contain.

Third, Grounds 1-3 further present new arguments compared to the Examiner's Liu-Kukulj combination. The Liu reference only disclosed curvature only along “long edges,” and not both “long” and “short” edges. POPR at 48; Ex. 1032 at 491, 502. The PO specifically argued Liu's single (only “long”) edge curvature was a reason for allowance, and the Examiner agreed. Ex. 1032 at 491. In contrast to Liu, Han discloses plate curvature along both an Ax and Ay direction. As such, in obvious combinations with i) Zhao and Cheng, ii) Cao and Zhao, and iii) Cheng and Shin, Han disclose having both curved “long” *and* “short” edges. Petition at Section V.B-D.

Put simply, the combinations considered by the Examiner “do not teach a curvature on the short edge and the long edge or that all of the edges of the top surface of the plate are curved” (POPR at 47), while the combinations asserted in the Petition do. Petition at 47-50, 52-54, 80-84, 86-88, 111-115, 117-119. Thus, each of Grounds 1-3 present new, non-cumulative arguments that were not considered by the Office.

III. CONCLUSION

On the basis of the Petition, un rebutted on substance, and the reasons provided above, trial should be instituted.

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Respectfully submitted,

By: /s/ Matthew W. Johnson

Matthew W. Johnson(Reg. No. 59,108)
mwjohnson@jonesday.com
Joshua R. Nightingale (Reg. No. 67,865)
jrnightingale@jonesday.com
Christian A. Roberts (Reg. No. 81,158)
croberts@jonesday.com
Ashvi S. Patel (Reg. No. 81,156)
ashvipatel@jonesday.com
JONES DAY
500 Grant Street, Suite 4500
Pittsburgh, PA 15219

Stephen M. Bradley (Reg. No. 81,622)
sbradley@jonesday.com
JONES DAY
1221 Peachtree Street N.E., Suite 400
Atlanta, Georgia 30361

S. Christian Platt (Reg. No. 46,998)
cplatt@jonesday.com
JONES DAY
4655 Executive Drive, Suite 1500
San Diego, CA 92121

Counsel for Petitioner

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing Petitioner's Reply to Patent Owner Preliminary Response to of U.S. Patent No. 11,281,335, was served on March 6, 2024 via electronic mail on Patent Owner's lead and backup counsel at the following email addresses:

Clayton McCraw (Reg No. 68,258)
CMcCraw@mayerbrown.com

Cliff A. Maier (Reg No. 59,526)
CMaier@mayerbrown.com

Michael A. Molano (Reg No. 39,777)
MMolano@mayerbrown.com

Counsel for Patent Owner

Date: March 6, 2024

By: /s/ Matthew W. Johnson
Matthew W. Johnson
Reg. No. 59,108
JONES DAY
500 Grant Street, Suite 4500
Pittsburgh, PA 15219
mwjohnson@jonesday.com