

IPR2018-01257
U.S. Pat. No. 8,552,978

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Google LLC

Petitioner

v.

Cywee Group Ltd.

(record) Patent Owner

IPR2018-01257

Patent No. 8,552,978

PETITIONER'S REPLY

TABLE OF CONTENTS

TABLE OF EXHIBITS	iii
I. CLAIM CONSTRUCTION	1
II. BACHMANN IS ANALOGOUS ART	1
A. Bachmann is in the Same Field of Endeavor as the '978 Patent	2
B. Bachmann is Reasonably Pertinent to the Problem in which the Inventors Were Involved.....	6
III. THE COMBINATIONS TEACH ALL ELEMENTS OF THE CLAIMS ...	13
A. The Combinations Teach All Elements of the Claims.....	13
B. There is Motivation to Combine Bachmann with Zhang and with Liberty.	22
C. The Combinations are Enabled.	24
IV. QUATERNIONS WERE WELL-KNOWN IN THE ART	27
CERTIFICATE OF SERVICE	29
CERTIFICATE OF WORD COUNT	30

TABLE OF EXHIBITS

Exhibit No.	Description
1001	U.S. Pat. No. 8,552,978 (“ the ’978 patent ”).
1002	Declaration of Professor Majid Sarrafzadeh.
1003	C.V. of Professor Majid Sarrafzadeh.
1004	U.S. Pat. No. 7,089,148 (“ Bachman ”).
1005	U.S. Pat. App. Pub. 2004/0095317 (“ Zhang ”).
1006	U.S. Pat. 7,158,118 (“ Liberty ”).
1007	Return of Service for <i>Cywee Group Ltd. v. Google, Inc.</i> , Case No. 1-18-cv-00571, (D. Del.).
1008	Return of Service for <i>Cywee Group Ltd. v. Huawei Technologies Co., Inc. et al.</i> , Case No. 2-17-cv-00495, (E.D. Tex.).
1009	File History of U.S. Pat. App. 13/176,771
1010	Joint Claim Construction and Prehearing Statement in <i>Cywee Group Ltd. v. Samsung Electronics Co. Ltd. et al.</i> , Case No. 2-17-cv-00140, (E.D. Tex.).
1011	Ex. D to Complaint of April 16, 2018 in <i>Cywee Group Ltd. v. Google, Inc.</i> , Case No. 1-18-cv-00571 (D. Del.).
1012	Email of August 3, 2018 from Michael Shore to Luann Simmons.
1013	CyWee’s First Requests for Production of Documents in <i>Cywee Group Ltd. v. Google, Inc.</i> , Case No. 1-18-cv-00571, (D. Del.).
1014	CyWee’s Opposition to Petitioner’s Motion for Joinder to Inter Partes Review IPR2018-01258 of February 8, 2019.

1015	CyWee's Opp. to Defendants' Motion to Stay Pending Inter Partes Review Proceedings in <i>CyWee Group, Ltd. v. Samsung Elec. Co., Ltd.</i> , Case 2:17-cv-00140-WCB-RSP (E.D. Tex. Jan. 25, 2019).
1016	Complaint of April 16, 2018 in <i>Cywee Group Ltd. v. Google, Inc.</i> , Case No. 1-18-cv-00571 (D. Del.).
1017	U.S. Pat. Pub. No. US 2010/0312468 A1 (" Withanawasam ").
1018	Rebuttal Declaration of Professor Majid Sarrafzadeh
1019	Deposition Transcript of Dr. Joseph LaViola in IPR2018-01257, -01258 (May 22, 2019) (" LaViola Tr. ").
1020	U.S. Pat. No. 7,356,361 (" Hawkins ").
1021	U.S. Pat. No. 7,630,741 (" Siddiqui ").
1022	U.S. Pat. No. 8,738,103 (" Puente Baliarda ")
1023	USPTO PATFT database search results (search string "ref/7089148").
1024	U.S. Pat. Pub. 2018/0153587 A1 (" van der Walt ").
1025	Deposition Transcript of Joseph LaViola in <i>CyWee Group Ltd., v. Huawei Device Co. Ltd.</i> , CASE NO. 2017-cv-00495-WCB-RSP (E.D. Tex. September 25, 2018).

Google respectfully submits this reply to CyWee's Patent Owner Response ("POR"). CyWee's arguments fail to rebut the case for unpatentability. This reply will address four broad issues in four sections: claim construction in §I, whether Bachmann is analogous art in §II, CyWee's arguments concerning specific claim limitations in §III, and whether quaternions were known in the relevant art in §IV.

I. CLAIM CONSTRUCTION

CyWee argues that the Board should re-construe the claim term "3D pointing device". The proposed construction would not affect any issue, however, because even under CyWee's proposed construction, the claims are still unpatentable.

II. BACHMANN IS ANALOGOUS ART

CyWee first argues that Bachmann is not analogous art. (POR, pp. 27-31). For a reference to be analogous art, it must pass one of two tests, namely "(1) whether the art is from the same field of endeavor, regardless of the problem addressed; and (2) if the reference is not within the field of the inventor's endeavor, whether the reference is still 'reasonably pertinent to the particular problem with which the inventor is involved.'" Institution Decision, p. 21, *citing In re Bigio*, 381 F.3d 1320 (Fed. Cir. 2004). Furthermore, under *KSR*, the scope of analogous art is "construed broadly". *See Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010).

CyWee makes two arguments concerning Bachmann. CyWee first argues that

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.