

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LG ELECTRONICS INC.,
Petitioner

v.

BELL NORTHERN RESEARCH, LLC,
Patent Owner.

Case IPR2020-00108
U.S. Patent No. 8,416,862

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

EXHIBITS

- EX1001 U.S. Pat. No. 8,416,862 to Aldana et al. (“the ’862 patent”)
- EX1002 Prosecution History of the ’862 patent (Serial No. 11/237,341)
- EX1003 Declaration of Dr. Jonathan Wells
- EX1004 U.S. Pat. No. 7,236,748 to Li et al. (“Li-748”)
- EX1005 U.S. Pub. No. 2008/0108310 to Tong et al. (“Tong”)
- EX1006 U.S. Pat. No. 7,312,750 to Mao et al. (“Mao”)
- EX1007 U.S. Pub. No. 2006/0092054 to Li et al. (“Li-054”)
- EX1008 Yang et al., Reducing the Computations of the Singular Value Decomposition Array Given by Brent and Luk, SIAM J. MATRIX ANAL. APPL., Vol. 12, No. 4, pp. 713-725, Oct. 1991 (“Yang”)
- EX1009 U.S. Pat. No. 7,710,925 to Poon (“Poon”)
- EX1010 U.S. Provisional Application Serial No. 60/673,451 (“’451 provisional”)
- EX1011 U.S. Provisional Application Serial No. 60/698,686 (“’686 provisional”)
- EX1012 U.S. Provisional Application Serial No. 60/614,621 (“’621 Provisional”)
- EX1013 U.S. Provisional Application Serial No. 60/619,461 (“’461 Provisional”)

- EX1014 U.S. Patent Application Serial No. 11/168,793 (“793 application”)
- EX1015 Plaintiff Bell Northern Research, LLC’s Patent Rule 3-1 and 3-2 Disclosure of Asserted Claims and Infringement Contentions Against the Huawei Defendants in *Bell Northern Research, LLC, v. Huawei Device (Dongguan) Co., Ltd., Huawei Device (Shenzhen) Co., Ltd., and Huawei Device USA, Inc.* (Case No. 3:18-cv-1784) (S.D.Cal.)
- EX1016 Defendants’ Invalidity Contentions in *Bell Northern Research, LLC, v. Huawei Device (Dongguan) Co., Ltd., Huawei Device (Shenzhen) Co., Ltd., and Huawei Device USA, Inc.* (Case No. 3:18-cv-1784) (S.D.Cal.)
- EX1017 Defendants’ Joint Opening Claim Construction Brief in *Bell Northern Research, LLC, v. Huawei Device (Dongguan) Co., Ltd., Huawei Device (Shenzhen) Co., Ltd., and Huawei Device USA, Inc.* (Case No. 3:18-cv-1784) (S.D.Cal.)
- EX1018 Plaintiff’s Opening Claim Construction Brief in *Bell Northern Research, LLC, v. Huawei Device (Dongguan) Co., Ltd., Huawei Device (Shenzhen) Co., Ltd., and Huawei Device USA, Inc.* (Case No. 3:18-cv-1784) (S.D.Cal.)
- EX1019 Defendants’ Memorandum of Points and Authorities in Support of Their Joint Motion for Summary Judgement on Indefiniteness in *Bell Northern Research, LLC, v. Huawei Device (Dongguan) Co., Ltd., Huawei Device (Shenzhen) Co., Ltd., and Huawei Device USA, Inc.* (Case No. 3:18-cv-1784) (S.D.Cal.)

- EX1020 Transcript of Claim Construction Hearing, Day Two, Volume Two, Pages 1-122 in *Bell Northern Research, LLC, v. Huawei Technologies CO., LTD., Huawei Device (Hong Kong) CO., LTD., and Huawei Device USA, Inc.* (Case No. 3:18-cv-1784) (S.D.Cal.)
- EX1021 Declaration of Jacob Munford
- EX1022 *Coolpad Tech., Inc. et al. v. Bell Northern Research, LLC*, IPR2019-01319, Paper 19 (PTAB Jan. 29, 2020)
- EX1023 *Coolpad Tech., Inc. et al. v. Bell Northern Research, LLC*, IPR2019-01320, Paper 18 (PTAB Jan. 29, 2020)
- EX1024 *ZTE (USA) Inc. v. Bell Northern Research, LLC*, IPR2019-01365, Paper 13 (PTAB Feb. 11, 2020)
- EX1025 Order of Transfer in *Bell Northern Research, LLC, v. LG Electronics, Inc. et al.* (Case No. 3:18-cv-2864) (S.D.Cal.)
- EX1026 Order of Transfer in *Bell Northern Research, LLC, v. ZTE Corp. et al.* (Case No. 3:18-cv-1786) (S.D.Cal.)
- EX1027 Scheduling Order in *Bell Northern Research, LLC, v. ZTE Corp. et al.* (Case No. 3:18-cv-1786) (S.D.Cal.)
- EX1028 Scheduling Order in *Bell Northern Research, LLC, v. Coolpad Technologies, Inc. et al.* (Case No. 3:18-cv-1783) (S.D.Cal.)
- EX1029 Transcript of Claim Construction Hearing in *Bell Northern Research, LLC, v. Coolpad Technologies, Inc. et al.* (Case No. 3:18-cv-1783) (S.D.Cal.)

- EX1030 Order Granting Renewed Motion to Stay Pending in *Inter Partes* Review in *Bell Northern Research, LLC, v. Coolpad Technologies, Inc. et al.* (Case No. 3:18-cv-1783) (S.D.Cal.)
- EX1031 Order Granting Renewed Motion to Stay Pending in *Bell Northern Research, LLC, v. ZTE Corp. et al.* (Case No. 3:18-cv-1786) (S.D.Cal.)
- EX1032 Transcript of Claim Construction Hearing in *Bell Northern Research, LLC, v. LG Electronics, Inc. et al.* (Case No. 3:18-cv-2864) (S.D.Cal.)
- EX1033 Joint Notice of Proposed Scheduling Order and Notice Regarding *Inter Partes* Reviews in *Bell Northern Research, LLC, v. LG Electronics, Inc. et al.* (Case No. 3:18-cv-2864) (S.D.Cal.)
- EX1034 Joint Motion to Extend the Case Management Order in *Inter Partes* Reviews in *Bell Northern Research, LLC, v. LG Electronics, Inc. et al.* (Case No. 3:18-cv-2864) (S.D.Cal.)

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.