

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

APPLE INC.  
Petitioner

v.

UNILOC USA, INC. and UNILOC LUXEMBOURG, S.A.  
Patent Owner

---

Patent 6,993,049

---

**DECLARATION OF DR. CHARLES D. KNUTSON  
IN SUPPORT OF THE PETITIONER'S REPLY**

**TABLE OF CONTENTS**

I. INTRODUCTION .....1

II. CLAIM CONSTRUCTION .....2

    A. “additional data field” .....2

    B. “broadcasting” .....3

    C. “inquiry message” .....7

III. UNILOC MISCHARACTERIZES OR MISUNDERSTANDS THE  
TEACHINGS OF LARSSON AND IROBEX .....11

    A. Larsson's broadcast message for route discovery is an  
    inquiry message .....11

    B. Larsson discloses adding an additional data field to its  
    inquiry message .....13

    C. IrOBEX discloses "the method comprising the primary  
    station broadcasting a series of inquiry messages" .....17

    D. IrOBEX was publicly available before June 26, 2000.....20

IV. CONCLUSION.....22

**DECLARATION EXHIBITS**

APPLE-1001	U.S. Patent No. 6,993,049 to Davies (“’049 Patent”)
APPLE-1002	Prosecution History of the ’049 Patent (“the Prosecution History”)
APPLE-1003	Declaration of Dr. Charles Knutson
APPLE-1004	Curriculum Vitae of Dr. Charles Knutson
APPLE-1005	U.S. Patent No. 6,704,293 (“Larsson”)
APPLE-1006	IrDA Object Exchange Protocol (“IrOBEX”)
APPLE-1007	Prosecution History of the 7,587,207 Patent (“’207 Prosecution History”)
APPLE-1008	Second Declaration of Dr. Charles Knutson
APPLE-1009	U.S. Patent No. 7,587,207 (“Davies” or the “’207 Patent”)
APPLE-1010	U.S. Patent No. 6,570,857 (“Haartsen”)
APPLE-1011	U.S. Patent No. 6,480,505 (“Johansson”)
APPLE-1012	Specification of the Bluetooth System: Wireless connections made easy, Profiles, Vol. 2, Bluetooth, Dec. 1, 1999 (“BT Profiles”)
APPLE-1013	The New Shorter Oxford English Dictionary on Historical Principles, Vol. 1, Clarendon Press, 1993 (“Oxford Dictionary”)
APPLE-1014	Specification of the Bluetooth System: Wireless connections made easy, Core, Vol. 1, Bluetooth, Dec. 1, 1999 (“BT Core”)
APPLE-1015	U.S. Patent No. 6,683,886 (“Tuijn”)

- APPLE-1016 Internet Archive Capture of <http://www.bluetooth.com:80/developer/specification/specification.asp> from March 1, 2000
- APPLE-1017 Internet Archive Capture of <http://www.bluetooth.com:80/developer/specification/core.asp> from March 1, 2000
- APPLE-1018 Internet Archive Capture of <http://www.bluetooth.com:80/developer/specification/order.asp> from March 1, 2000
- APPLE-1019 Internet Archive Capture of <http://www.bluetooth.com:80/news/archive/archive.asp> from March 4, 2000
- APPLE-1020 Declaration of Michael Foley
- APPLE-1021 The Concise Oxford English Dictionary, 5<sup>th</sup> Ed., Oxford University Press, 1964 (“Concise Oxford English Dictionary”)
- APPLE-1022 Amended Complaint dated May 30, 2018, Uniloc USA v Apple Inc., Civil Action No. 1:18-cv-00164-LY, Western District of Texas, Austin Division (“Complaint”)
- APPLE-1023 McGraw-Hill Dictionary of Electrical and Computer Engineering, ISBN 0-07-144210-3, 2004
- APPLE-1024 Internet Archive Capture of <https://web.archive.org/web/20000618190007/http://www.bluetooth.com/text/news/archive/archive.asp?news=2> from June 18, 2000
- APPLE-1025 U.S. Patent No. 6,622,018 (“Erekson”)
- APPLE-1026 PCT Patent Application Publication No. WO 00/76238 (“Buttery”)
- APPLE-1027 U.S. Patent No. 6,922,548 (“Moore”)
- APPLE-1028 U.S. Patent No. 6,799,318 (“Davison”)
- APPLE-1029 U.S. Patent No. 6,779,185 (“Roukbi”)

- APPLE-1030 U.S. Patent No. 6,982,962 (“Lunsford”)
- APPLE-1031 U.S. Patent No. 6,255,800 (“Bork”)
- APPLE-1032 U.S. Patent No. 6,975,205 (“French”)
- APPLE-1033 Declaration of Mr. Peter Rysavy
- APPLE-1034 Declaration of Mr. Lawrence Faulkner
- APPLE-1035 Declaration of Dr. Charles Knutson
- APPLE-1036 “Wireless Wonders Coming Your Way” by Peter Rysavy,  
[https://rysavyresearch.files.wordpress.com/2017/08/2000\\_05\\_wireless\\_wonders.pdf](https://rysavyresearch.files.wordpress.com/2017/08/2000_05_wireless_wonders.pdf), last accessed on January 8, 2020.
- APPLE-1037 Internet Archive Capture of  
<https://web.archive.org/web/20000517192715/http://www.bluetooth.com/text/news/archive/archive.asp?news=2>, last accessed on January 8, 2020.
- APPLE-1038 Internet Archive Capture of  
<https://web.archive.org/web/20000518114920/http://www.bluetooth.com/text/news/archive/archive.asp?news=list>, last accessed on January 8, 2020.
- APPLE-1039 Oregon State University Open Source Lab Webpage,  
<http://netwinder.osuosl.org/pub/netwinder/docs/nw/irda/>, last visited January 8, 2020.
- APPLE-1040 Stuart Williams, IrDA: Past, Present and Future, IEEE Personal Communications, Vol. 7, Issue 1, 11-19, Feb. 2000
- APPLE-1041 The IrDA Standards for High-Speed Infrared Communications, The Hewlett-Packard Journal, February, 1998.

# 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.