

03-05-01

A/PROV. 1

Please type a plus sign (+) inside this box +

PTO/SB/16 (8-00)
Approved for use through 10/31/2002. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

11054 U.S. PTO
03/01/01

JC973 U.S. PTO
50273021
03/01/01

INVENTOR(S)		
Given Name (first and middle (if any))	Family Name or Surname	Residence (City and either State or Foreign Country)
Daniel M.	Fischer	303-276 Eiwo Ct. Waterloo, Ontario, CANADA N2K 3M6

Additional inventors are being named on the 1 separately numbered sheets attached hereto

TITLE OF THE INVENTION (280 characters max)
SYSTEM AND METHOD FOR ADAPTING A USB TO PROVIDE
POWER FOR CHARGING A MOBILE DEVICE

Direct all correspondence to: **CORRESPONDENCE ADDRESS**
 Customer Number → Place Customer Number Bar Code Label here
OR
Type Customer Number here

<input checked="" type="checkbox"/> Firm or Individual Name	David B. Cochran, Esq.				
Address	Jones, Day, Reavis & Pogue				
Address	North Point, 901 Lakeside Avenue				
City	Cleveland	State	OH	ZIP	44114
Country	US	Telephone	216/586-3939	Fax	216/579-0212

ENCLOSED APPLICATION PARTS (check all that apply)

<input checked="" type="checkbox"/> Specification Number of Pages	<input type="text" value="16"/>	<input checked="" type="checkbox"/> Appendix A - 33 pgs.
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets	<input type="text" value="6"/>	<input checked="" type="checkbox"/> Assignment 7 pgs.
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76		<input checked="" type="checkbox"/> Other (specify) Power of Attorney for Provisional Appln. 2 pgs.

METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT

<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.	FILING FEE AMOUNT (\$) \$190.00
<input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees	
<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number: <input type="text" value="501432"/>	
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.	

The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.
 No.
 Yes, the name of the U.S. Government agency and the Government contract number are: _____

Respectfully submitted,
David B. Cochran
SIGNATURE
TYPED or PRINTED NAME David B. Cochran
TELEPHONE (216/586-3939)

Date 3/2/01
REGISTRATION NO. 39,142
(if appropriate)
Docket Number: 555255012132

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

PROVISIONAL APPLICATION COVER SHEET

Additional Page

PTO/SB/16 (8-00)

Approved for use through 10/31/2002. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Docket Number	555255012132	Type a plus sign (+) inside this box →	+
---------------	--------------	---	---

INVENTOR(S)/APPLICANT(S)		
Given Name (first and middle [if any])	Family or Surname	Residence (City and either State or Foreign Country)
Dan G.	Radut	300 Regina St. N., 1-1207 Waterloo, Ontario, CANADA N2J 3B8
Michael F.	Habicher	27 Ronald Road Cambridge, Ontario, CANADA N1S 4N2
Quang	Luong	94 Fairway Road Unit 10 Kitchener, Ontario, CANADA N2A 2N5
Jonathan	Malton	100 Highland Cr. Kitchener, Ontario, CANADA N2M 5C1

Number 1 of 1

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Title of the Invention

System and Method for Adapting a USB to Provide Power for Charging a
Mobile Device

Inventors

Daniel M. Fischer
Dan G. Radut
Mike Habicher
Quang Luong
Jonatahan Malton

555255-012-132

TITLE OF INVENTION

System and Method for Adapting a USB to Provide Power for Charging a Mobile Device

FIELD OF INVENTION

This invention relates to rechargeable mobile devices having access to a Universal Serial Bus (USB). In particular, this invention relates to adapting power from the USB for use as a power source by the charging system of the mobile device to re-charge the portable power supply of the mobile device.

BACKGROUND OF THE INVENTION

On one hand, the Universal Serial Bus (USB) is a communications bus for connecting a USB host controller such as a computer to peripheral devices. USB peripheral devices can be differentiated based on how they obtain their power in order to operate while connected. A self-powered peripheral has access to a power supply external to USB, whereas a bus-powered peripheral derives all of its power from the USB.

On the other hand, traditional mobile devices usually have a portable power supply that provides power to the mobile device while it is in service. Some portable power supplies are rechargeable so that when power is depleted and the portable power supply becomes discharged, a charging system can be used to restore the charge in the portable power supply. The charging system obtains power from an alternate power source, such as an AC outlet of a home or office electrical network, in order to recharge the portable power supply.

Certain rechargeable mobile devices use a separate charging system such as a docking cradle. Other rechargeable mobile devices integrate a built-in charging system in order to facilitate recharging the portable power supply while it is still installed in the mobile device.

Recently the hitherto separate fields of USB and mobile devices have collided. Certain rechargeable mobile devices have evolved to access USB capabilities in order to become USB peripherals for the purpose of communicating with USB host controllers such as a computer. In some cases, USB capabilities have been incorporated into the docking cradle, whereas in other cases USB capabilities have been integrated into the rechargeable mobile device itself, in a manner analogous to the location of the traditional charging system.

Traditional rechargeable mobile devices having a USB already have access to two power supplies, specifically a portable power supply and an alternate power supply. Therefore USB capable rechargeable mobile devices traditionally operate as self-powered USB peripherals.

There is a need for a system and method of adapting the charging system of a USB capable rechargeable mobile device to use the power traditionally available on the USB as an alternate power source for recharging the portable power supply of the mobile device thereby eliminating the need for a separate charging and USB interfaces.

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.