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PTO 898036/60  
10/23/01

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

Express Mail Label No.

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<input checked="" type="checkbox"/> Additional inventors are being named on the <u>1</u> separately numbered sheets attached hereto					
TITLE OF THE INVENTION (280 characters max)					
MULTIFUNCTIONAL CHARGER SYSTEM AND METHOD					
CORRESPONDENCE ADDRESS					
<input type="checkbox"/> Customer Number <span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>		<div style="border: 1px solid black; padding: 5px; display: inline-block;">           Place Customer Number Bar Code Label here         </div>			
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<input checked="" type="checkbox"/> Firm or Individual Name		Krishna K. Pathiyal, Esq.			
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ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification Number of Pages <span style="border: 1px solid black; display: inline-block; width: 40px; text-align: center;">19</span>		<input type="checkbox"/> CD(s), Number <span style="border: 1px solid black; display: inline-block; width: 60px;"></span>			
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets <span style="border: 1px solid black; display: inline-block; width: 40px; text-align: center;">4</span>		<input checked="" type="checkbox"/> Other (specify) <span style="border: 1px solid black; display: inline-block; padding: 2px;">Power of Attorney</span>			
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76					
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 (\$)  <span style="border: 1px solid black; display: inline-block; width: 60px; text-align: center;">160.00</span>
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<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.					
<input checked="" type="checkbox"/> No.					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____					

Respectfully submitted,

SIGNATURE

Date 22/10/01

TYPED or PRINTED NAME

Krishna K. Pathiyal, Esq.

REGISTRATION NO.

44435

(if appropriate)

Docket Number:

850-001

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## Multifunctional Charger System and Method

### CROSS-REFERENCE TO RELATED APPLICATION

This application is related to the following prior application: System and  
5 Method for Adapting a USB to Provide Power for Charging a Mobile Device,  
United States Provisional Application No. 60/273021, filed March 1<sup>st</sup>, 2001. This  
prior application, including the entire written description and drawing figures, is  
hereby incorporated into the present application by reference.

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### BACKGROUND

#### 1. FIELD OF THE INVENTION

This invention relates generally to power adapters and battery chargers.  
More particularly, the invention provides a USB (Universal Serial Bus) power  
adapter and battery charger for charging a first battery at a mobile device and a  
15 second battery at the charger simultaneously or independently. The invention is  
particularly well suited for use in Personal Digital Assistants, mobile  
communication devices, cellular phones, and wireless two-way e-mail  
communication devices, which may have a USB interface (collectively referred to  
herein as "mobile devices"). The invention provides utility, however, in any  
20 device that may need to draw power via the USB interface and/or has a  
rechargeable battery.

2. DESCRIPTION OF THE RELATED ART

Supplying power to a mobile device involves the participation of a mobile device on one hand, as well as the participation of a power source on the other.

5 On one hand, most mobile devices provide a first power interface for receiving power from a power source, for instance to recharge a battery, and a second data interface for communicating that is separate from the power interface. Although it is desirable to have a combined power and data interface, most combined interfaces are non-standard so that one mobile device provided by one  
10 manufacturer with one combined interface cannot cooperate with the combined interfaces of other manufacturers.

Furthermore, many mobile devices now have USB (Universal Serial Bus) interfaces for communicating, although they still maintain a separate power interface, such as a barrel connector, for receiving power.

15 However, a USB chargeable mobile device provided according to System and Method for Adapting a USB to Provide Power for Charging a Mobile Device, United States Provisional Application No. 60/273021, filed March 1<sup>st</sup>, 2001, has a single USB interface for both communicating and recharging a battery. Given that USB connectors are popular widely supported in industry, a USB chargeable  
20 device solves the problem of the combined interface at a USB chargeable mobile device.

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