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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
11/175,885	07/06/2005	Daniel M. Fischer	55255012844

93377
RIM/FINNEGAN
901 New York Avenue NW
Washington, DC 20001

CONFIRMATION NO. 5606
POA ACCEPTANCE LETTER



0C00000044264106

Date Mailed: 11/02/2010

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/24/2010.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/skiflemariam/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
11/175,885	07/06/2005	Daniel M. Fischer	55255012844

CONFIRMATION NO. 5606

POWER OF ATTORNEY NOTICE



82313
Research in Motion Corp./CR
Attn: J. Robert Brown
5601 Granite Parkway, Suite 750
Plano, TX 75024

Date Mailed: 11/02/2010

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/24/2010.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

/skiflemarian/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

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.

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(b).

I hereby appoint:

Practitioners associated with the Customer Number:

93377

OR

Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number	Name	Registration Number

as attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignment documents attached to this form in accordance with 37 CFR 3.73(b).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(b) to:

The address associated with Customer Number:

93377

OR

<input type="checkbox"/> Firm or Individual Name			
Address			
City	State	Zip	
Country			
Telephone	Email		

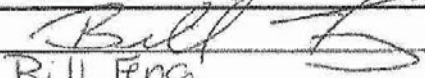
Assignee Name and Address:

Research In Motion Limited
 295 Phillip Street
 Waterloo, Ontario, Canada N2L 3W8

A copy of this form, together with a statement under 37 CFR 3.73(b) (Form PTO/SB/96 or equivalent) is required to be filed in each application in which this form is used. The statement under 37 CFR 3.73(b) may be completed by one of the practitioners appointed in this form if the appointed practitioner is authorized to act on behalf of the assignee, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	591888-7465
Name	Bill Feng	Telephone	Dec. 23109
Title	Vice President, Shared Services		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Legal OK
 MA 

RIM 01

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STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: RESEARCH IN MOTION LIMITED

Application No./Patent No.: 7,239,111 Filed/Issue Date: July 3, 2007

Titled:

RESEARCH IN MOTION LIMITED, a Corporation
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

- 1. the assignee of the entire right, title, and interest in;
 - 2. an assignee of less than the entire right, title, and interest in
 (The extent (by percentage) of its ownership interest is _____ %); or
 - 3. the assignee of an undivided interest in the entirety of (a complete assignment from one of the joint inventors was made)
- the patent application/patent identified above, by virtue of either:

A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 013155, Frame 0301, or for which a copy therefore is attached.

OR

B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
 Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
 Reel _____, Frame _____, or for which a copy thereof is attached.

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at
 Reel _____, Frame _____, or for which a copy thereof is attached.

Additional documents in the chain of title are listed on a supplemental sheet(s).

As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/BRYAN C. DINER/
 Signature

October 24, 2010
 Date

BRYAN C. DINER
 Printed or Typed Name

Reg. No. 32,409
 Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt

EFS ID:	8689098
Application Number:	11175885
International Application Number:	
Confirmation Number:	5606
Title of Invention:	A UNIVERSAL SERIAL BUS ADAPTER FOR A MOBILE DEVICE
First Named Inventor/Applicant Name:	Daniel M. Fischer
Customer Number:	82313
Filer:	Bryan C. Diner/Janet Weems
Filer Authorized By:	Bryan C. Diner
Attorney Docket Number:	555255012844
Receipt Date:	24-OCT-2010
Filing Date:	06-JUL-2005
Time Stamp:	11:07:17
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	RIM_FINNEGAN_POA.PDF	151330 <small>35uf9271e706cun8125022uR2: 95..0U544 e2ad</small>	no	1

Warnings:

Information:

2	Assignee showing of ownership per 37 CFR 3.73(b).	SB96_Statement_Under_37_CFR_3.73.pdf	468991 0a9f53406e67226216bd42b6cae11c0ba1dab8d	no	2
Warnings:					
Information:					
Total Files Size (in bytes):				620321	
<p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p>					



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APPLICATION NUMBER	PATENT NUMBER	GROUP ART UNIT	FILE WRAPPER LOCATION
11/175,885	7239111	2838	7581



Correspondence Address/Fee Address Change

The following fields have been set to Customer Number 82313 on 08/21/2009

- Correspondence Address
- Maintenance Fee Address
- Power of Attorney Address

The address of record for Customer Number 82313 is:

82313
Research in Motion Corp./CR
Attn: J. Robert Brown
5601 Granite Parkway, Suite 750
Plano, TX 75024

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 7,239,111 B2
APPLICATION NO. : 11/175885
DATED : July 3, 2007
INVENTOR(S) : Daniel M. Fischer et al.

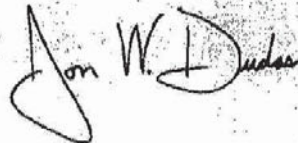
Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Col. 6, line 66, replace "10D" with -- 110D --
Col. 6, line 67, replace "10B" with -- 110B --
Col. 7, line 22, replace "10D" with -- 110D --
Col. 7, line 22, replace "10B" with -- 110B --
Col. 7, line 60, replace "10D" with -- 110D --

Signed and Sealed this

Eighteenth Day of December, 2007



JON W. DUDAS
Director of the United States Patent and Trademark Office

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Daniel M. Fischer, et al.	§	
Patent No.:	7,239,111 B2	§	Group Art Unit: 2838
Issued:	July 3, 2007	§	Examiner: Tso, Edward H.
For:	UNIVERSAL SERIAL BUS ADAPTER FOR A MOBILE DEVICE	§	Confirmation No. 5606

CERTIFICATE OF FILING

Mail Stop: Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Pursuant to 37 C.F.R. §1.8, I hereby certify that this correspondence is being electronically submitted to the U.S. Patent and Trademark Office website, www.uspto.gov, on:

October 23 2007

Date of Filing

Karen Harris
Karen Harris

REQUEST FOR CERTIFICATE OF CORRECTION

Commissioner:

Patentees hereby request that a Certificate of Correction be issued pursuant to 37 C.F.R. §1.322 to correct the mistakes as set out in the attached draft certificate.

The mistakes to be corrected are minor and editorial in nature. As the mistakes were made on the part of the U.S. Patent and Trademark Office, no fee is deemed required. However, should a fee be found necessary, please charge Deposit Account 50-1515, Conley Rose, P.C., for any required fees.

Respectfully submitted,

Date: 10-23-07

J. Robert Brown, Jr.

J. Robert Brown, Jr.

Reg. No. 45,438

CONLEY ROSE, P.C.
5601 Granite Parkway, Suite 750
Plano, Texas 75024
(972) 731-2288
(972) 731-2289 (fax)

ATTORNEY FOR APPLICANTS

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO.: 7,239,111 B2
APPLICATION NO.: 11/175,885
DATED : July 3, 2007
INVENTORS: Daniel M. Fischer, et al.

It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

- Col. 6, line 66, replace "10D" with -- 110D --
- Col. 6, line 67, replace "10B" with -- 110B --
- Col. 7, line 22, replace "10D" with -- 110D --
- Col. 7, line 22, replace "10B" with -- 110B --
- Col. 7, line 60, replace "10D" with -- 110D --

MAILING ADDRESS OF SENDER:

J. Robert Brown, Jr.
CONLEY, ROSE, P.C.
5601 Granite Parkway, Suite 750
Plano, Texas 75024

PATENT NO. 7,239,111 B2

Electronic Acknowledgement Receipt

EFS ID:	2355393
Application Number:	11175885
International Application Number:	
Confirmation Number:	5606
Title of Invention:	A UNIVERSAL SERIAL BUS ADAPTER FOR A MOBILE DEVICE
First Named Inventor/Applicant Name:	Daniel M. Fischer
Customer Number:	54120
Filer:	J. Robert Brown/Karen Harris
Filer Authorized By:	J. Robert Brown
Attorney Docket Number:	555255012844
Receipt Date:	23-OCT-2007
Filing Date:	06-JUL-2005
Time Stamp:	12:14:38
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
------------------------	----

File Listing:

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Certificate of Correction	4214-01503_RequestCertificateofCorrection.pdf	37069 <small>7d4285ca5453a718d711d8363abae3b 64e29e636</small>	no	2

Warnings:

Information:	
Total Files Size (in bytes):	37069
<p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p>	
<p><u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p>	
<p><u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p>	
<p><u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p>	



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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/175,885	07/03/2007	7239111	555255012844	5606

54120 7590 06/13/2007
RESEARCH IN MOTION, LTD
102 DECKER CT.
SUITE 180
IRVING, TX 75062

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Daniel M. Fischer, Waterloo, CANADA;
Dan G. Radut, Waterloo, CANADA;
Michael F. Habicher, Cambridge, CANADA;
Quang A. Luong, Kitchener, CANADA;
Jonathan T. Malton, Kitchener, CANADA;



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BIBDATASHEET

CONFIRMATION NO. 5606

Bib Data Sheet

SERIAL NUMBER 11/175,885	FILING OR 371(c) DATE 07/06/2005 RULE	CLASS 320	GROUP ART UNIT 2838	ATTORNEY DOCKET NO. 555255012844	
APPLICANTS Daniel M. Fischer, Waterloo, CANADA; Dan G. Radut, Waterloo, CANADA; Michael F. Habicher, Cambridge, CANADA; Quang A. Luong, Kitchener, CANADA; Jonathan T. Malton, Kitchener, CANADA;					
** CONTINUING DATA ***** This application is a CON of 10/087,629 03/01/2002 PAT 6,936,936 which claims benefit of 60/273,021 03/01/2001 and claims benefit of 60/330,486 10/23/2001					
** FOREIGN APPLICATIONS *****					
IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 07/28/2005					
Foreign Priority claimed <input type="checkbox"/> yes <input type="checkbox"/> no		STATE OR COUNTRY CANADA	SHEETS DRAWING 4	TOTAL CLAIMS 18	INDEPENDENT CLAIMS 3
35 USC 119 (a-d) conditions met <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance					
Verified and Acknowledged		Examiner's Signature	Initials		
ADDRESS 54120					
TITLE A UNIVERSAL SERIAL BUS ADAPTER FOR A MOBILE DEVICE					
FILING FEE RECEIVED 1300	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) <input type="checkbox"/> 1.18 Fees (Issue) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit		

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"FEE ADDRESS" INDICATION FORMAddress to:
Mail Stop M Correspondence
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450Fax to:
571-273-6500

- OR -

INSTRUCTIONS: The issue fee must have been paid for application(s) listed on this form. In addition, only an address represented by a Customer Number can be established as the fee address for maintenance fee purposes (hereafter, fee address). A fee address should be established when correspondence related to maintenance fees should be mailed to a different address than the correspondence address for the application. **When to check the first box below:** If you have a Customer Number to represent the fee address. **When to check the second box below:** If you have no Customer Number representing the desired fee address, in which case a completed Request for Customer Number (PTO/SB/125) must be attached to this form. For more information on Customer Numbers, see the Manual of Patent Examining Procedure (MPEP) § 403.

For the following listed application(s), please recognize as the "Fee Address" under the provisions of 37 CFR 1.363 the address associated with:

 Customer Number: **30652**

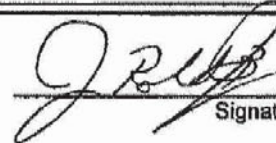
OR

 The attached Request for Customer Number (PTO/SB/125) form.

PATENT NUMBER (if known)	APPLICATION NUMBER
	11/175,885

Completed by (check one):

 Applicant/Inventor



Signature

 Attorney or Agent of record 45,438
(Reg. No.)

J. Robert Brown, Jr.
Typed or printed name

 Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

972-731-2288
Requester's telephone number

 Assignee recorded at Reel _____ Frame _____

June 1, 2007
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

 * Total of _____ forms are submitted.

This collection of information is required by 37 CFR 1.363. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 5 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop M Correspondence, Commissioner for Patents, P.O. Box 1480, Alexandria, VA 22313-1480.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
11/175,885	07/06/2005	Daniel M. Fischer	555255012844

54120
RESEARCH IN MOTION, LTD
102 DECKER CT.
SUITE 180
IRVING, TX 75062

CONFIRMATION NO. 5606
OC000000024243390
OC000000024243390

Date Mailed: 06/06/2007

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 06/01/2007.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

[Handwritten Signature]

Office of Initial Patent Examination (571) 272-4000, or 1-800-PTO-9199
OFFICE COPY



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
11/175,885	07/06/2005	Daniel M. Fischer	55255012844

33070
JOSEPH M. SAUER
JONES DAY REAVIS & POGUE
NORTH POINT, 901 LAKESIDE AVENUE
CLEVELAND, OH 44114

CONFIRMATION NO. 5606
OC000000024243360
OC000000024243360

Date Mailed: 06/06/2007

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 06/01/2007.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).



Office of Initial Patent Examination (571) 272-4000, or 1-800-PTO-9199
OFFICE COPY

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

33070 7590 03/08/2007

JOSEPH M. SAUER
JONES DAY REAVIS & POGUE
NORTH POINT, 901 LAKESIDE AVENUE
CLEVELAND, OH 44114

CONLEY ROSE, P.C.
 5700 GRANITE PARKWAY
 STE. 330
 PLANO TX 75024

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

Karen A. Harris	(Depositor's name)
<i>Karen A. Harris</i>	(Signature)
June 1, 2007	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/175,885	07/06/2005	Daniel M. Fischer	555255012844	5606

TITLE OF INVENTION: A UNIVERSAL SERIAL BUS ADAPTER FOR A MOBILE DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$0	\$1700	06/08/2007

EXAMINER	ART UNIT	CLASS-SUBCLASS
TSO, EDWARD H	2838	320-111000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

- 1 Conley Rose, P.C.
- 2 J. Robert Brown, Jr.
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

RESEARCH IN MOTION LIMITED

WATERLOO, ONTARIO, CANADA

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are submitted:

- Issue Fee
- Publication Fee (No small entity discount permitted)
- Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- A check is enclosed.
- Payment by credit card. Form PTO-2038 is attached.
- The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 50-1515 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature

J. Robert Brown, Jr.

Date

June 1, 2007

Typed or printed name

J. Robert Brown, Jr.

Registration No.

45,438

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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.

Electronic Patent Application Fee Transmittal

Application Number:	11175885			
Filing Date:	06-Jul-2005			
Title of Invention:	A UNIVERSAL SERIAL BUS ADAPTER FOR A MOBILE DEVICE			
First Named Inventor/Applicant Name:	Daniel M. Fischer			
Filer:	J. Robert Brown/Karen Harris			
Attorney Docket Number:	555255012844			
Filed as Large Entity				
Utility Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl Issue fee	1501	1	1400	1400
Publ. Fee- early, voluntary, or normal	1504	1	300	300

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1700

Electronic Acknowledgement Receipt

EFS ID:	1830701
Application Number:	11175885
International Application Number:	
Confirmation Number:	5606
Title of Invention:	A UNIVERSAL SERIAL BUS ADAPTER FOR A MOBILE DEVICE
First Named Inventor/Applicant Name:	Daniel M. Fischer
Customer Number:	33070
Filer:	J. Robert Brown/Karen Harris
Filer Authorized By:	J. Robert Brown
Attorney Docket Number:	555255012844
Receipt Date:	01-JUN-2007
Filing Date:	06-JUL-2005
Time Stamp:	14:50:36
Application Type:	Utility

Payment information:

Submitted with Payment	yes
Payment was successfully received in RAM	\$ 1700
RAM confirmation Number	102
Deposit Account	501515

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:
Charge any Additional Fees required under 37 C.F.R. Section 1.16 and 1.17

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	4214_GeneralPowerofAttorney.PDF	46387	no	1
Warnings:					
Information:					
2	Change of Address	4214-01503_FeeAddressIndication.PDF	60105	no	1
Warnings:					
Information:					
3	Issue Fee Payment (PTO-85B)	4214-01503_IssueFeeTransmittal.PDF	97845	no	1
Warnings:					
Information:					
4	Fee Worksheet (PTO-06)	fee-info.pdf	8295	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			212632		
<p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p>					

GENERAL POWER OF ATTORNEY
For Intellectual Property Proceedings

WHEREAS, Research in Motion Limited, a corporation organized and existing under the laws of Canada, having a principal office and place of business at 295 Phillip Street, Waterloo, Ontario, Canada, N2L 3W8 owns certain patent, trademark and other intellectual property, and has proceedings relating to its intellectual property ("IP proceedings") pending before the United States Patent and Trademark Office as well as in other foreign jurisdictions;

WHEREAS, Conley Rose, P.C., a professional corporation organized and existing under the laws of the State of Texas, having a principal office and place of business located at 5700 Granite Parkway, Suite 330, Plano, Texas 75024, United States of America, associated with Customer No. **30652**, is also responsible for handling some of these IP proceedings on behalf of Research in Motion Limited;

NOW, THEREFORE, as an authorized representative of Research in Motion Limited, I hereby appoint the following:

J. Robert Brown, Jr.	Reg. No. 45,438	Rodney B. Carroll	Reg. No. 39,624
Kristin Jordan Harkins	Reg. No. 37,859	Grant Rodolph	Reg. No. 50,487
Michael W. Piper	Reg. No. 39,800	Albert C. Metrailler	Reg. No. 27,145
Shannon W. Bates	Reg. No. 47,412		

as our attorney(s) and/or agent(s) to prosecute and transact all business related to Research in Motion Limited IP proceedings in the U.S. Patent and Trademark Office.

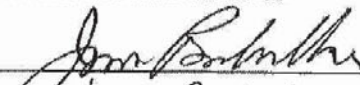
Please direct all correspondence associated with Customer No. 54120 to:

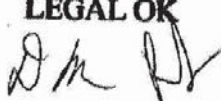
Research in Motion Limited
102 Decker Ct., Suite 180
Irving, Texas 75062
United States of America

The undersigned is an authorized representative having the title hereunder of Research in Motion Limited. As an authorized representative, the undersigned is authorized to sign and execute documents, including the Power of Attorney, on behalf of Research in Motion Limited.

In Testimony Whereof, I hereunto set my hand this 8th day of May, 2007.

RESEARCH IN MOTION LIMITED

By: 
Name: Jim Balsillie
Title: Co-CEO

LEGAL OK


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"FEE ADDRESS" INDICATION FORM

Address to:
Mail Stop M Correspondence
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Fax to:
571-273-6500

- OR -

INSTRUCTIONS: The issue fee must have been paid for application(s) listed on this form. In addition, only an address represented by a Customer Number can be established as the fee address for maintenance fee purposes (hereafter, fee address). A fee address should be established when correspondence related to maintenance fees should be mailed to a different address than the correspondence address for the application. **When to check the first box below:** If you have a Customer Number to represent the fee address. **When to check the second box below:** If you have no Customer Number representing the desired fee address, in which case a completed Request for Customer Number (PTO/SB/125) must be attached to this form. For more information on Customer Numbers, see the Manual of Patent Examining Procedure (MPEP) § 403.

For the following listed application(s), please recognize as the "Fee Address" under the provisions of 37 CFR 1.363 the address associated with:

Customer Number: 30652

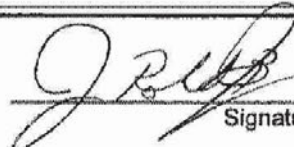
OR

The attached Request for Customer Number (PTO/SB/125) form.

PATENT NUMBER (if known)	APPLICATION NUMBER
	11/175,885

Completed by (check one):

Applicant/Inventor


Signature

Attorney or Agent of record 45,438
(Reg. No.)

J. Robert Brown, Jr.
Typed or printed name

Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

972-731-2288
Requester's telephone number

Assignee recorded at Reel _____ Frame _____

June 1, 2007
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

* Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.363. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 5 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop M Correspondence, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

33070 7590 03/08/2007

JOSEPH M. SAUER
JONES DAY REAVIS & POGUE
NORTH POINT, 901 LAKESIDE AVENUE
CLEVELAND, OH 44114

EXAMINER: TSO, EDWARD H
ART UNIT: 2838
PAPER NUMBER:
DATE MAILED: 03/08/2007

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
Row 1: 11/175,885, 07/06/2005, Daniel M. Fischer, 555255012844, 5606
TITLE OF INVENTION: A UNIVERSAL SERIAL BUS ADAPTER FOR A MOBILE DEVICE

Table with 7 columns: APPLN. TYPE, SMALL ENTITY, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE
Row 1: nonprovisional, NO, \$1400, \$300, \$0, \$1700, 06/08/2007

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
 or **Fax** (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

33070 7590 03/08/2007

JOSEPH M. SAUER
 JONES DAY REAVIS & POGUE
 NORTH POINT, 901 LAKESIDE AVENUE
 CLEVELAND, OH 44114

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

_____	(Depositor's name)
_____	(Signature)
_____	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/175,885	07/06/2005	Daniel M. Fischer	555255012844	5606

TITLE OF INVENTION: A UNIVERSAL SERIAL BUS ADAPTER FOR A MOBILE DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$0	\$1700	06/08/2007

EXAMINER	ART UNIT	CLASS-SUBCLASS
TSO, EDWARD H	2838	320-111000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
 Change of correspondence address (or Change of Correspondence Address Form PTO/SB/122) attached.
 "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list
 (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, _____ 1
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. _____ 2
 _____ 3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)
 PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.
 (A) NAME OF ASSIGNEE _____ (B) RESIDENCE: (CITY and STATE OR COUNTRY) _____

Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. The following fee(s) are submitted:
 Issue Fee
 Publication Fee (No small entity discount permitted)
 Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)
 A check is enclosed.
 Payment by credit card. Form PTO-2038 is attached.
 The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)
 a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
 Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/175,885	07/06/2005	Daniel M. Fischer	555255012844	5606
33070	7590	03/08/2007	EXAMINER	
JOSEPH M. SAUER JONES DAY REAVIS & POGUE NORTH POINT, 901 LAKESIDE AVENUE CLEVELAND, OH 44114			TSO, EDWARD H	
			ART UNIT	PAPER NUMBER
			2838	
DATE MAILED: 03/08/2007				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

21

Notice of Allowability	Application No.	Applicant(s)	
	11/175,885	FISCHER ET AL.	
	Examiner	Art Unit	
	Edward H. Tso	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to a Terminal Disclaimer filed 11/22/06.
2. The allowed claim(s) is/are 1-18.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

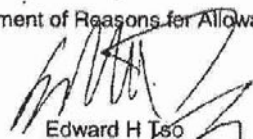
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.


4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

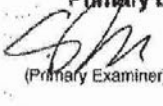
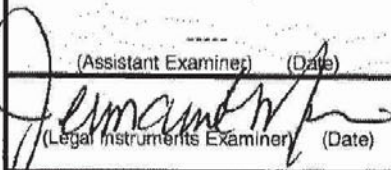
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____ 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
|---|---|


 Edward H. Tso
 Primary Examiner
 Art Unit: 2838

Issue Classification 	Application/Control No. 11/175,885	Applicant(s)/Patent under Reexamination FISCHER ET AL.
	Examiner Edward H. Tso	Art Unit 2838

ISSUE CLASSIFICATION											
ORIGINAL				INTERNATIONAL CLASSIFICATION							
CLASS		SUBCLASS		CLAIMED			NON-CLAIMED				
320		111		H	01	M	10	/46		/	
CROSS REFERENCES										/	
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)									/	
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				Edward H. Tso Primary Examiner  (Primary Examiner)			Total Claims Allowed: 18				
 (Assistant Examiner) (Date) (Legal Instruments Examiner) (Date)				3/27 (Date)			O.G. Print Claim(s) 1		O.G. Print Fig. 4		

<input checked="" type="checkbox"/> Claims renumbered in the same order as presented by applicant		<input type="checkbox"/> CPA		<input type="checkbox"/> T.D.		<input type="checkbox"/> R.1.47	
Final	Original	Final	Original	Final	Original	Final	Original
	1		31		61		91
	2		32		62		92
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Bib Data Sheet

CONFIRMATION NO. 5606

Table with 5 columns: SERIAL NUMBER (11/175,885), FILING OR 371(c) DATE (07/06/2005), CLASS (320), GROUP ART UNIT (2838), ATTORNEY DOCKET NO. (555255012844)

APPLICANTS: Daniel M. Fischer, Waterloo, CANADA; Dan G. Radut, Waterloo, CANADA; Michael F. Habicher, Cambridge, CANADA; Quang A. Luong, Kitchener, CANADA; Jonathan T. Malton, Kitchener, CANADA.
** CONTINUING DATA ***** This application is a CON of 10/087,629 03/01/2002 PAT 6,936,936 which claims benefit of 60/273,021 03/01/2001 and claims benefit of 60/330,486 10/23/2001
** FOREIGN APPLICATIONS *****
IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 07/28/2005

Table with 6 columns: Foreign Priority claimed (yes/no), 35 USC 119 (a-d) conditions met (yes/no/Met after Allowance), STATE OR COUNTRY (CANADA), SHEETS DRAWING (4), TOTAL CLAIMS (18), INDEPENDENT CLAIMS (3)

ADDRESS: 33070

TITLE: A Universal Serial Bus Adapter for a Mobile Device

Table with 2 columns: FILING FEE RECEIVED (1000) and FEES: Authority has been given in Paper No. to charge/credit DEPOSIT ACCOUNT No. for following: (List of fee options: All Fees, 1.16 Fees (Filing), 1.17 Fees (Processing Ext. of time), 1.18 Fees (Issue), Other, Credit)


← interference search →

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	69970	usb	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2007/03/03 21:15
L2	931970	hub or host	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2007/03/03 21:15
L3	4100521	power	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2007/03/03 21:16
L4	3402	1 same 2 same 3	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2007/03/03 21:16
L5	716386	mobile	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2007/03/03 21:16
L6	136	4 same 5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2007/03/03 21:16
L7	2671353	identification or id	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2007/03/03 21:17
L8	9	6 same 7	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2007/03/03 21:23

EAST Search History

L9	42	(1 and 2 and 3 and 5 and 7).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT ; IBM_TDB	OR	ON	2007/03/03 21:23
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Application Number 	Application No. 11/175,885	Applicant(s) FISCHER ET AL.	
	Terminal Disclaimer Filed: 11/22/06		

TERMINAL DISCLAIMER	<input checked="" type="checkbox"/> APPROVED	<input type="checkbox"/> DISAPPROVED
Document Code - DISQ INTERNAL DOCUMENT - DO NOT MAIL	This patent is subject to a Terminal Disclaimer	Reasons:

U.S. Patent and Trademark Office

NOTE DISCLAIMER:

The term of this patent shall not extend beyond the expiration date of Pat. No.

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CLAIMS

1. (Original) A Universal Serial Bus ("USB") adapter for providing power to a mobile device through a USB port, comprising:
 - a plug unit configured to receive energy from a power socket;
 - a power converter coupled to the plug unit, the power converter being configured to regulate the received energy from the power socket to generate a power output;
 - an identification subsystem configured to generate an identification signal, wherein the identification signal is configured to indicate to the mobile device that the power socket is not a USB host or hub; and
 - a USB connector coupled to the power converter and the identification subsystem, the USB connector being configured to couple the power output and the identification signal to the mobile device.
2. (Original) The USB adapter of claim 1, wherein the plug unit is configured to couple directly with the power socket.
3. (Original) The USB adapter of claim 2, wherein the plug unit is configured to couple to at least one power socket selected from the group consisting of: North American power socket, United Kingdom power socket, European power socket, Australian power socket, airplane power socket, and automobile power socket.
4. (Original) The USB adapter of claim 1, further comprising a plug adapter that is configured to couple the plug unit to the power socket.

5. (Original) The USB adapter of claim 4, wherein the plug adapter is configured to couple to at least one power socket selected from the group consisting of: North American power socket, United Kingdom power socket, European power socket, Australian power socket, airplane power socket, and automobile power socket.

6. (Original) the USB adapter of claim 1, wherein the identification signal comprises a voltage level that is applied to at least one data line in the USB connector.

7. (Original) The USB adapter of claim 1, wherein the identification subsystem comprises a hard-wired connection of a voltage level to one or more data lines in the USB connector.

8. (Original) The USB adapter of claim 1, wherein the identification subsystem comprises a USB controller that is configured to provide a voltage level to one or more data lines in the USB connector.

9. (Original) The USB adapter of claim 1, wherein the identification subsystem further comprises a switch that is configured to couple the power output to the USB connector.

10. (Original) The USB adapter of claim 9, wherein the identification subsystem is configured to cause the switch to disconnect the power output from the USB connector.

11. (Original) The USB adapter of claim 10, wherein the identification subsystem is configured to cause the switch to reconnect the power output to the USB connector.

12. (Original) The USB adapter of claim 1, further comprising an auxiliary USB connector.

13. (Original) The USB adapter of claim 12, wherein one or more data lines of the auxiliary USB connector are coupled to one or more data lines of the USB connector via the identification subsystem.

14. (Original) The USB adapter of claim 12, wherein the power converter is operable to generate a second power output that is coupled to the auxiliary USB connector.

15. (Original) The USB adapter of claim 1, further comprising:

a battery receptacle configured to attach a rechargeable battery; and

a battery charging subsystem coupled between the battery receptacle and the power converter, the battery charging subsystem being configured to receive energy from the power converter and to provide power at the battery receptacle.

16. (Original) The USB adapter of claim 1, wherein the power converter comprises at least one component selected from the group consisting of: switching converter, transformer, DC source, voltage regulator, linear regulator and rectifier.

17. (Original) A method for providing energy to a mobile device using a USB adapter that includes a USB connector for coupling the USB adapter to the mobile device, comprising:

receiving a power input from a power socket;

generating a regulated DC power output from the power input;

generating an identification signal that is configured to indicate to the mobile device that the power socket is not a USB host or hub;

providing the identification signal on one or more data pins of the USB connector;

and

providing the power output on one or more power pins of the USB connector.

18. (Original) A Universal Serial Bus ("USB") adapter for providing a source of power to a mobile device through a USB port, comprising:

means for receiving energy from a power socket;

means for regulating the received energy from the power socket to generate a power output;

means for generating an identification signal that indicates to the mobile device that the power socket is not a USB hub or host; and

means for coupling the power output and identification signal to the mobile device.

REMARKS

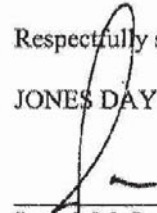
This paper responds to the Office Action mailed on August 24, 2006. Reconsideration is respectfully requested in light of the following remarks.

Claims 1-18 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of copending application no. 10/087,629.

Applicants respectfully request entry of the terminal disclaimer filed herewith so that such provisional double patenting rejection is obviated. Applicants thus submit that claims 1-18 are in condition for allowance.

Respectfully submitted,

JONES DAY



Joseph M. Sauer (Reg. No. 47,919)
Jones Day
North Point, 901 Lakeside Avenue
Cleveland, Ohio 44114
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PTO/SB/25 (09-08)
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TERMINAL DISCLAIMER TO OBTAIN A PROVISIONAL DOUBLE PATENTING REJECTION OVER A PENDING "REFERENCE" APPLICATION

Docket Number (Optional)
555255012844

In re Application of: Fischer et al.
Application No.: 11/175,885
Filed: 07/06/2005
For: A Universal Serial Bus Adapter for a Mobile Device

The owner*, Research In Motion Limited, of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of any patent granted on pending reference Application Number 10/087,629, filed on 03/01/2002, as such term is defined in 35 U.S.C. 154 and 173, and as the term of any patent granted on said reference application may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending reference application. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and any patent granted on the reference application are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

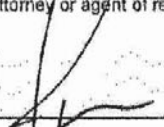
In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. 154 and 173 of any patent granted on said reference application, "as the term of any patent granted on said reference application may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending reference application," in the event that: any such patent: granted on the pending reference application: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as shortened by any terminal disclaimer filed prior to its grant.

Check either box 1 or 2 below, if appropriate.

- 1. For submissions on behalf of a business/organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the business/organization.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

- 2. The undersigned is an attorney or agent of record. Reg. No. 47919



Signature

11/20/06

Date

11/24/2006 RMEBRAHT 00000028 501432 11175885

Joseph M. Sauer, Esq.

Typed or printed name

01 FC:1814 130.00 DA

216/586-7506

Telephone Number

- Terminal disclaimer fee under 37 CFR 1.20(d) is included.

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.

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
Form PTO/SB/96 may be used for making this statement. See MPEP § 324.

This collection of information is required by 37 CFR 1.321. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 11/175,885	Filing Date 07/06/2005	<input type="checkbox"/> To be Mailed
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APPLICATION AS FILED - PART I			OTHER THAN SMALL ENTITY				
FOR	NUMBER FILED (Column 1)	NUMBER EXTRA (Column 2)	RATE (\$)	FEE (\$)		RATE (\$)	FEE (\$)
<input type="checkbox"/> BASIC FEE <small>(37 CFR 1.16(e), (o), or (p))</small>	N/A	N/A	N/A			N/A	
<input type="checkbox"/> SEARCH FEE <small>(37 CFR 1.16(k), (l), or (m))</small>	N/A	N/A	N/A			N/A	
<input type="checkbox"/> EXAMINATION FEE <small>(37 CFR 1.16(o), (p), or (q))</small>	N/A	N/A	N/A			N/A	
TOTAL CLAIMS <small>(37 CFR 1.16(i))</small>	minus 20 = *	*	X \$ =		OR	X \$ =	
INDEPENDENT CLAIMS <small>(37 CFR 1.16(h))</small>	minus 3 = *	*	X \$ =		OR	X \$ =	
<input type="checkbox"/> APPLICATION SIZE FEE <small>(37 CFR 1.16(s))</small>	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT <small>(37 CFR 1.16(j))</small>							
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	

APPLICATION AS AMENDED - PART II					OTHER THAN SMALL ENTITY				
	(Column 1)	(Column 2)	(Column 3)		RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)
AMENDMENT	11/22/2006	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA					
	Total (37 CFR 1.16(i))	* 18	Minus ** 20	= 0	X \$ =		OR	X \$60 =	0
	Independent (37 CFR 1.16(i))	* 3	Minus *** 3	= 0	X \$ =		OR	X \$200 =	0
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))							OR	
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	0

	(Column 1)	(Column 2)	(Column 3)		RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA					
	Total (37 CFR 1.16(i))	*	Minus **	=	X \$ =		OR	X \$ =	
	Independent (37 CFR 1.16(i))	*	Minus ***	=	X \$ =		OR	X \$ =	
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))							OR	
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
 ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
 *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
 The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:
 Rosalind Ball

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. 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, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
11/175,885	07/06/2005	Daniel M. Fischer	555255012844	5606

33070 7590 08/24/2006

JOSEPH M. SAUER
JONES DAY REAVIS & POGUE
NORTH POINT, 901 LAKESIDE AVENUE
CLEVELAND, OH 44114

EXAMINER

TSO, EDWARD H

ART UNIT PAPER NUMBER

2838

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 11/175,885	Applicant(s) FISCHER ET AL.	
	Examiner Edward H. Tso	Art Unit 2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 June 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 6/15/06.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date: _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

Information Disclosure Statement

An IDS filed 6/15/06 has been considered and placed of record. An initialed copy is attached herewith.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-18 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims of

pending Application No. 10/087,629. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to have monitored the usb connection to make sure it is not connected to the wrong power source.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication should be directed to the Examiner at the below-listed number on every Tuesday, Thursday and Saturday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Karl Easthom, can be reached at (571) 272-1989 on Monday-Thursday.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist at (571) 272-2800, Monday-Friday, 8:30am to 5:00pm, EST.

By: _____



EDWARD H TSO
Primary Examiner
(571) 272-2087

Notice of References Cited	Application/Control No. 11/175,885	Applicant(s)/Patent Under Reexamination FISCHER ET AL.	
	Examiner Edward H. Tso	Art Unit 2838	Page 1 of 1

U.S. PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A US-			
	B US-			
	C US-			
	D US-			
	E US-			
	F US-			
	G US-			
	H US-			
	I US-			
	J US-			
	K US-			
	L US-			
	M US-			

FOREIGN PATENT DOCUMENTS

*	Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N				
	O				
	P				
	Q				
	R				
	S				
	T				

NON-PATENT DOCUMENTS

*	Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)			
*	U	US 2001/0003205 A1 (Gilbert), 07 June 2001. 713/320.		
	V			
	W			
	X			

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
 Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	("20040251878").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/18 09:31
L2	2404924	(universal serial bus) or usb	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:53
L3	1271432	identif\$6	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:32
L4	400696	socket	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:32
L5	28790	2 and 3 and 4	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:33
L6	315061	mobile	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:33
L7	5140	5 and 6	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:34
L8	574304	plug	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:34
L9	2267	7 and 8	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:36
L10	1209063	charg\$3	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:34
L11	2267	8 and 9	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:34
L12	1178	9 and 10	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:40
L13	24	("3775659" "4433251" "5173855" "5229649" "5272475" "5444378" "5631503" "5638540" "5651057" "5769877" "5850113" "5939860" "6006088" "6104162" "6104759" "6130518" "6138242" "6184652" "6211649" "6252375" "6255800" "6283789" "6668296" "6738856").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:48

EAST Search History

L15	449	(ac adj plug) and 2	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:50
L16	53	(ac adj plug) same 2	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:53
L17	52607	(universal adj serial adj bus) or usb	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 09:53
L18	18	(ac adj plug) same 17	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 10:03
L19	0	("2001003205").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/18 10:03
L20	1	("20010003205").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/08/18 10:10
L21	2457	17 same 3	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 10:10
L22	47	21 same 4	US-PGPUB; USPAT; USOCR	OR	ON	2006/08/18 10:10



IFW

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No. 555255-012844

Group Art Unit: 2838)
 Examiner: Edward H. Tso)
 Inventor: Fischer, et al.)
 Serial No.: 11/175,885)
 Filed: July 06, 2005)
 For: A Universal Serial Bus Adapter for)
 a Mobile Device)

OFFICE ACTION RESPONSE

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 13, 2006.

By *Julia Pejean*

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action mailed on April 4, 2006, please consider the following remarks.

Any fees due should be charged to Jones Day Deposit Account No. 501432, ref: 555255-012844.

REMARKS

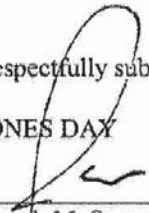
This Amendment responds to the Office Action mailed on April 4, 2006. Reconsideration is respectfully requested in light of the following remarks.

Claims 1-18 were rejected as anticipated by and obvious in view of Veselic (U.S. Pub. No. 2004/0251878). However, as Applicants' representative mentioned in a phone message for the Examiner, the current application claims priority to two provisional applications, the latest of which is dated 10/23/2001. Veselic has a priority date of 6/11/2003. Therefore, Veselic is not prior art to this application.

Applicants respectfully submit that claims 1-18 are in condition for allowance. The Examiner is, therefore, respectfully requested to enter this amendment and pass this case to issue.

Respectfully submitted,

JONES DAY



Joseph M. Sauer (Reg. No. 47,919)
Jones Day
NorthPoint, 901 Lakeside Avenue
Cleveland, Ohio 44114
(216) 586-7506



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Fischer et al.

Application No.: 11/175,885

Art Unit: 2838

Filed: July 6, 2005

Examiner: Edward Tso

For: A Universal Serial Bus Adapter for a Mobile Device

Attorney Docket No.: 555255-012844

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450


Sir:

This Statement is submitted in compliance with 37 C.F.R. § 1.56.

A list of patent(s) and/or publication(s) is set forth on the attached Form PTO-1449. A copy of each item is enclosed.

Any fees required for the proper filing of this Information Disclosure Statement should be withdrawn from Jones Day's Deposit Account No. 50-1432, account 555255-012844.

Respectfully submitted,



Joseph Sauer
Reg. No. 47,919
JONES DAY
901 Lakeside Avenue
Cleveland, Ohio 44114
(216) 586-7076

Date: 6/8/06

I hereby certify that this correspondence is being deposited today with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

on June 13, 2006
By: Debra L. Beyan

CL1-1298334v1



(12) **EUROPEAN PATENT APPLICATION**

(21) Application number: 95106552.3

(51) Int. Cl.⁸: H02J 7/00

(22) Date of filing: 02.05.95

(30) Priority: 16.05.94 FI 942271

(43) Date of publication of application:
29.11.95 Bulletin 95/48

(89) Designated Contracting States:
DE FR GB SE

(71) Applicant: **NOKIA MOBILE PHONES LTD.**
P.O. Box 86
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(54) **Identification apparatus and method.**

(57) The object of the invention is a method and a switching arrangement for identifying the charger of the rechargeable batteries of portable devices. In the solution according to the invention the charger transmits the identification of the charger via a charging

cable by switching the charging voltage on and off by using a certain pulse ratio, pulse length, or pulse count. The solution according to the invention can be applied in mobile phone sets.

EP 0 684 680 A1

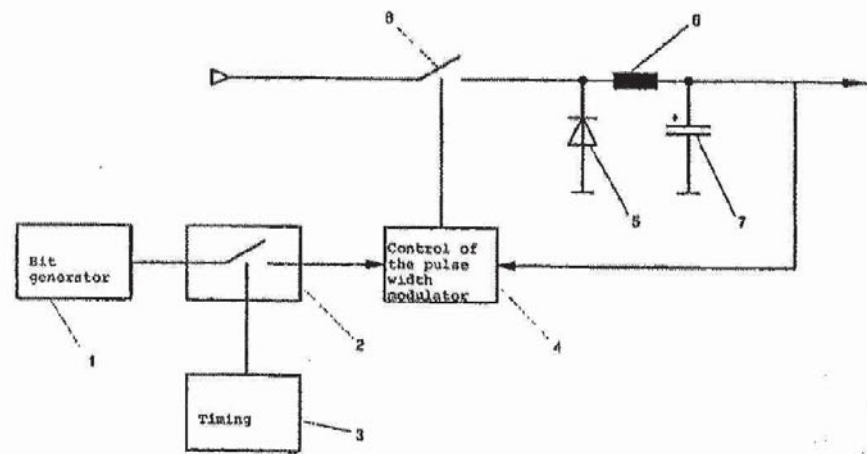


Fig. 1

The present invention relates to identification apparatus and a method therefor. In particular, it relates to such apparatus and method for accessory devices of electronic devices such as portable telephones.

There are many types of peripheral devices used with electronic devices. A particularly common accessory device is a battery charger for portable devices such as portable telephones. The present invention will now be discussed in terms of the state of the art and by way of example, with reference to battery chargers.

There are a number of known methods for charging rechargeable batteries for portable devices, such as nickel-cadmium batteries. Many of these chargers require the removal of the batteries from the device to enable recharging. Removal of the batteries from the device is considered a drawback, since the device is out of operation during the recharging. However, a number of different chargers have been developed which can be attached to a battery powered device and the batteries charged in situ in the device. In this way, the functionality of the device can be maintained while charging the batteries. Even though the functionality of the device is maintained, a portable device, such as a mobile phone, is unavailable for operation in the manner intended, i.e., as a portable device. Since chargers often recharge a battery using a fairly low charging current, the battery powered device is not available for portable operation for extended periods of time, such as eight hours or more during which time the batteries are being recharged.

Many battery powered devices, such as mobile phones, are extremely energy intensive, expending considerable amounts of power during the receive functions and more particularly during the transmit functions. Because of lengthy recharging times, "rapid" chargers have been developed which can charge batteries fairly rapidly, for example in less than an hour as compared with the charging time of eight hours for previous battery chargers.

In order to charge batteries rapidly, numerous problems had to be overcome. One of the most serious problems was overcharging of the batteries, resulting in turn in overheating of the batteries. Overheating may damage the battery case seals, resulting in rupturing of the battery case and in extreme instances in explosive rupturing of the battery case.

In known "rapid" battery chargers most of these problems have been solved in one way or another, e.g., by monitoring given battery parameters, such as the charging rate of the battery, internal battery temperatures or charge state of the battery. In some "rapid" chargers, attempts have been made to prevent overcharging of the batteries

by utilizing timed charging of the battery. However, using these known solutions it is not always possible to prevent overcharging of batteries, for instance, when the charger type is not exactly a correct one or designed to be used with the battery being charged.

Numerous different types of chargers are on the market which comprise different charging capacities and charging parameters for charging rechargeable batteries of portable devices. Some chargers can even be unsuitable, i.e., hazardous for the batteries. Consequently, portable devices should be able to somehow identify the charger and its properties. Similar problems exist for accessory devices generally for all types of electronic device, not just battery charges or portable telephones.

According to a first aspect of the present invention, there is provided identification apparatus for an accessory device, comprising coupling means for coupling the accessory device to an electronic device and modulation means for modulating a signal on the coupling means in accordance with identity data for the accessory device. modulating a signal on the coupling means in accordance with identity data for the accessory device.

According to a second aspect of the present invention, there is provided an identification method for an accessory device, comprising transmitting an identity signal from the accessory device to an electronic device coupled thereto by modulating a signal transmitted therebetween in accordance with identity data for the accessory device.

This has the advantage that the accessory device can indicate to an electronic device to which it is connected which peripheral device it is. Thus, there is provided a solution to a problem of identifying accessory devices.

In a preferred embodiment the modulation means comprises a switch means operable to activate and de-activate the coupling means.

Preferably, the identification apparatus further comprises a bit generator or corresponding charger for generating the identity data.

Suitably, there is provided control means adopted to control the modulation means in accordance with the identity data for superimposing a pulse ratio, pulse length, pulse count or the like signal on the signal on the coupling means.

Advantageously, there is provided timing means for determining a time during which the modulation means is operable, in particular the timing means comprises a timer and a switch operable in accordance with the timer to decouple the identity data from the control and/or modulation means.

Optionally, the switch means comprises a switching transistor or field effect transistor.

Embodiments in accordance with the invention are now described, by way of example only, and with reference to the appended drawings in which:

Fig. 1 shows a diagrammatic illustration of the implementation of apparatus in accordance with the invention,

Fig. 2 shows a more detailed diagrammatic illustration of the apparatus of Fig. 1

In a device in accordance with the invention a battery charger for a transportable device transmits an identification code for the charger via a charging cable, by switching the charging voltage on and off using a certain pulse ratio or pulse length or pulse count. Such identification can be implemented after a certain start-up time or before starting an actual charging routine. It can also be carried out in the initial stage of charging after having switched the charging on or entered a charging routine.

Fig. 1 shows an implementation of an embodiment in accordance with the invention. The identification of the charger is formed by using bit generator 1 from which the identification is taken via switching block 2, controlled by timing block 3, to control block 4 of a pulse width modulator. A switching transistor or field effect transistor functions as switch 8 and takes a charging voltage containing the identification as a modulation imposed thereon, via inductance 6 to the output of the charger. Timing block 3 can also operate to control switch 8 to stay on after the pulse identification has been transmitted from the charger. The main circuit comprises, in a known manner, parallel diode 5 and parallel capacitor 7 coupled to ground. The charging voltage may be the output of a DC/DC converter, the output of which is then switched on or off by switch 8.

Fig. 2 shows a slightly more detailed diagrammatic illustration of the apparatus in accordance with the invention. The identification of the charger is formed by using logic NAND circuit 9 (an AND circuit having an inverting output), from where the identification is transmitted to control block 4 of the pulse width modulator. The resistances shown in Figure 2 are marked with numbers 10 and 11 and the capacitors are marked with numbers 12 and 13. A switching transistor or field effect transistor functions as switch 8 and takes the charging voltage containing the identification via inductance 6 to the output of the charger. The pulse identification is formed until capacitor 12 is charged, switch 8 being left switched on thereafter.

In view of the foregoing description it will be evident to a person skilled in the art that various modifications may be made within the scope of the invention. For example, the accessory device need not be a battery charger but could be some other

accessory, and the electronic device need not be just a portable telephone. Additionally, the modulation of the charging voltage may comprise varying the charging voltage as well as switching it on or off.

The scope of the present disclosure includes any novel feature or combination of features disclosed therein either explicitly or implicitly or any generalisation thereof irrespective of whether or not it relates to the claimed invention or mitigates any or all of the problems addressed by the present invention. The applicant hereby gives notice that new claims may be formulated to such features during prosecution of this application or of any such further application derived therefrom.

Claims

1. Identification apparatus for an accessory device, comprising coupling means for coupling the accessory device to an electronic device and modulation means for modulating a signal on the coupling means in accordance with identity data for the accessory device.
2. Identification apparatus according to claim 1, wherein the modulation means comprises a switch means operable to activate and deactivate the coupling means.
3. Identification apparatus according to claim 1 or claim 2, further comprising a bit generator or corresponding charger for generating the identity data.
4. Identification apparatus according to any preceding claim, wherein there is provided control means adapted to control the modulation means in accordance with the identity data for superimposing a pulse ratio, pulse length, pulse count or the like signal on the signal on the coupling means.
5. Identification apparatus according to any preceding claim, wherein there is provided timing means for determining a time during which the modulation means is operable.
6. Identification apparatus according to claim 5, wherein the timing means comprises a timer and a switch operable in accordance with the timer to decouple the identity data from the control and/or modulation means.
7. Identification apparatus according to any preceding claim, wherein the switch means comprises a switching transistor or field effect transistor.

8. Identification apparatus according to claim 1, further comprising:
- a logic NAND circuit,
 - resistance, and
 - capacitance, wherein
- the identity data is formed by using the logic NAND circuit, from where the identity data is taken to control block for a pulse width modulator.
9. A battery charger comprising identification apparatus according to any preceding claim, wherein the coupling means is adapted to carry a charging voltage, and the signal on the coupling means is a charging voltage.
10. An identification method for an accessory device, comprising transmitting an identity signal from the accessory device to an electronic device coupled thereto by modulating a signal transmitted therebetween in accordance with identity data for the accessory device.
11. A method according to claim 10, wherein the signal is modulated by switching the signal on or off.

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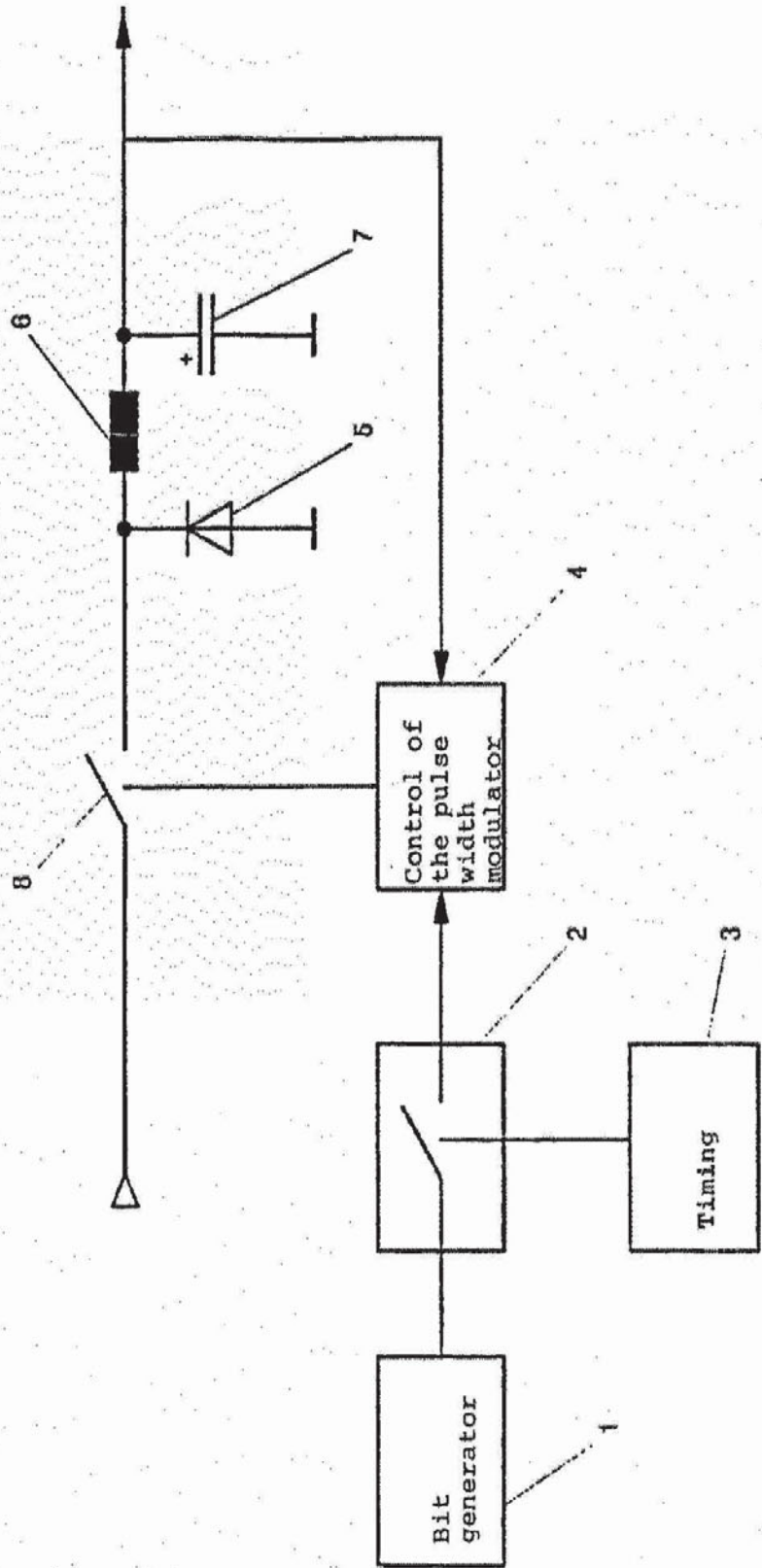


Fig. 1

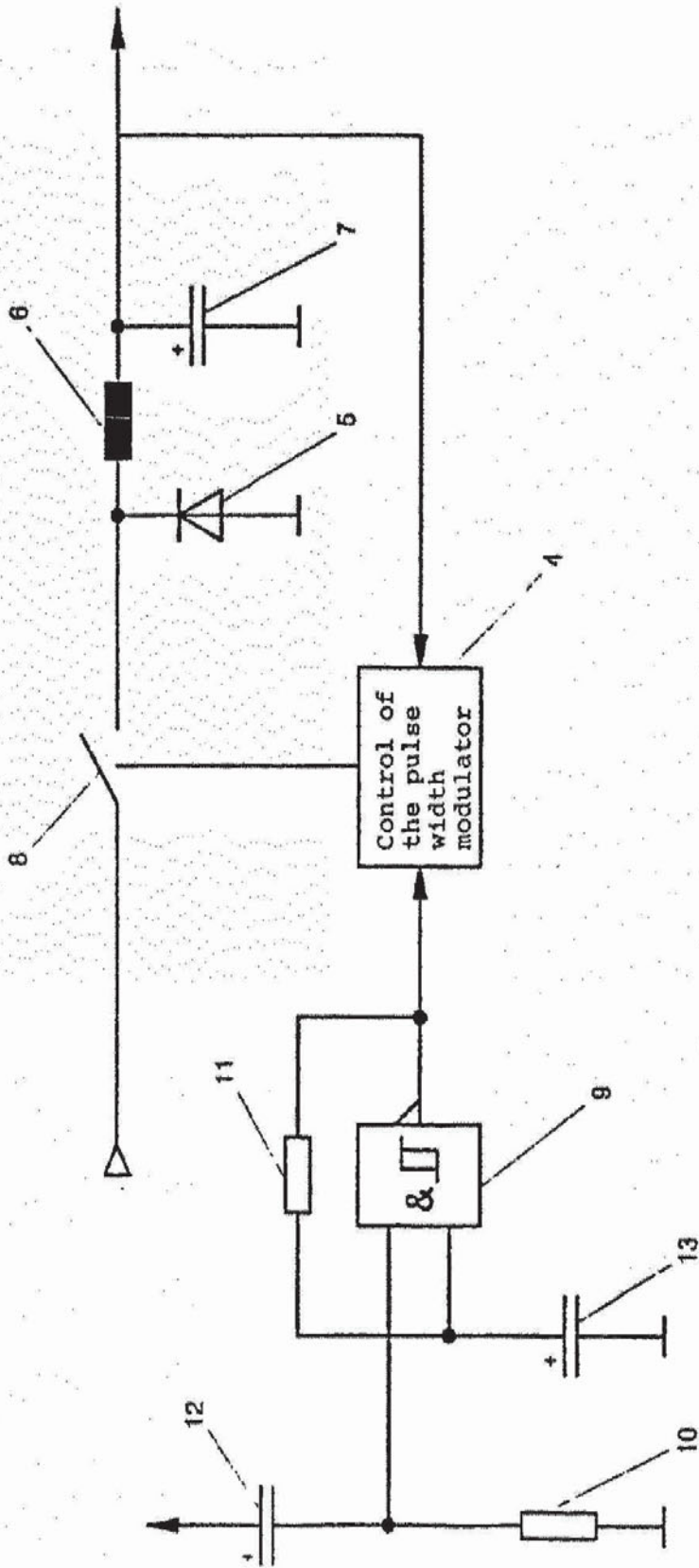


Fig. 2



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 95 10 6552

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	EP-A-0 409 226 (HITACHI LTD.) * abstract * * column 18, line 40 - line 55 * * column 19, line 38 - line 51 * * column 20, line 24 - column 21, line 7; figures 25,26,29 * * column 27, line 37 - line 55; figures 41,42 *	1,3-8, 10,11	H02J7/00
X	EP-A-0 038 877 (P. ROUET) * abstract * * page 3, line 18 - line 31; figure 5 *	1,2	
X	DE-A-35 28 659 (JUNGHEINRICH UNTERNEHMENSVERWALTUNG KG) * abstract * * column 9, line 3 - column 10, line 23; figures 1-3 *	1,9	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			H02J
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 22 August 1995	Examiner Helot, H
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPO FORM 1503 (01.92) (P04004)

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication: 17.04.2002 Bulletin 2002/16 (51) Int Cl.7: H02J 7/00

(21) Application number: 00122142.3

(22) Date of filing: 12.10.2000

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
 Designated Extension States:
AL LT LV MK RO SI

(74) Representative: **Körber, Martin, Dipl.-Phys. et al Mitscherlich & Partner**
Patentanwälte
Sonnenstrasse 33
80331 München (DE)

(71) Applicant: **Sony International (Europe) GmbH**
10785 Berlin (DE)

Remarks:
 The application is published incomplete as filed (Article 93 (2) EPC). Claim number 7 is missing.

(72) Inventor: **Tong, Zhao, c/o Digital Telecom. Europe**
85609 Aschheim (DE)

(54) **Charging circuit for charging a mobile terminal through an USB interface**

(57) The present invention relates to a charging circuit (1) for charging a mobile terminal (2) of a wireless telecommunication system through a USB interface of a computer (3), with first connection means (4) for connection with the USB interface of a computer (3), second connection means (5) for connection with a mobile terminal (2) to be charged, and adaptation means (6; 7; 8)

for adapting power received from the USB interface to the power requirements of a mobile terminal to be charged. The present invention further relates to a mobile terminal (2) adapted to be connected and charged by such a charging circuit (1). The present invention enables charging of a mobile terminal through a USB interface of a computer in a simple and flexible way.

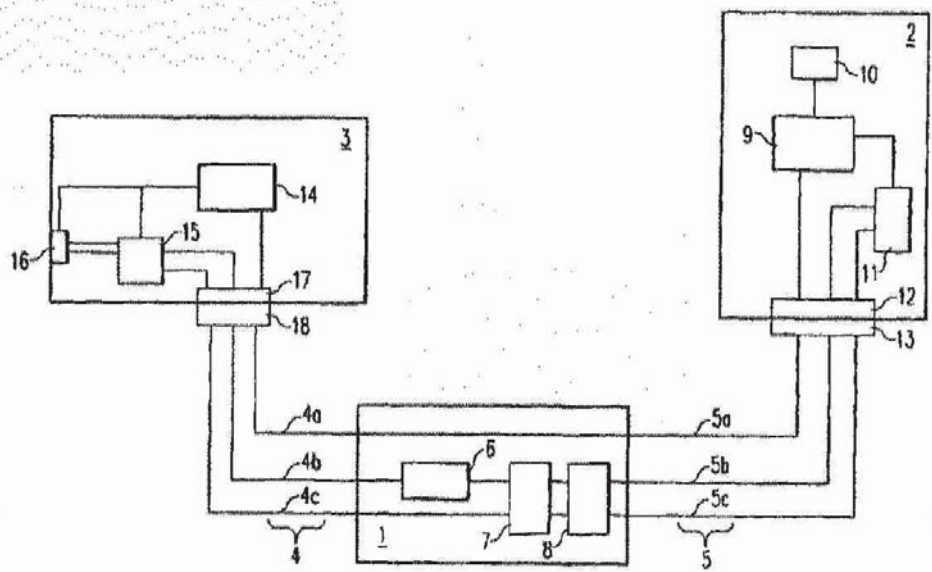


Fig. 1

EP 1 198 049 A1

Description

[0001] The present invention relates to a charging circuit for charging a mobile terminal of a wireless telecommunication system through a USB interface of a computer and to a mobile terminal for a wireless telecommunication system adapted to be connected to and charged by such a charging circuit.

[0002] Charging circuits for charging batteries or accumulators of mobile terminals are known in the art. For example, US 5,870,815 discloses a specially designed PCMCIA card comprising a charging circuit for charging the battery of a cellular phone and an adapter cable having a battery characteristic encoder integrated at one end. However, a PCMCIA card can only be used with portable computers, such as laptops, notebooks or the like so that the proposed way of charging a mobile terminal is limited to these applications.

[0003] The object of the present invention is therefore to propose a charging circuit for charging a mobile terminal of a wireless telecommunication system and a mobile terminal adapted to be connected to and charged by such a charging circuit, which can be used with different kinds of computers in a simple and effective way.

[0004] The above object is achieved by a charging circuit for charging a mobile terminal of a wireless telecommunication system through a USB interface of a computer, with first connection means for a connection with the USB interface of a computer, second connection means for a connection with a mobile terminal to be charged, and adaptation means for adapting power received from said USB interface to the power requirements of a mobile terminal to be charged.

[0005] Most of the available computers, such as PCs, laptops, notebooks and the like, are equipped with a USB interface (universal serial bus interface) for connection with other devices. The USB interface is realised with a standardised USB port in the computers, to which a corresponding USB plug from a USB data cable is connected. The USB interface comprises four lines, namely two data lines, one power line and one ground line. The charging circuit according to the present invention therefore presents a very flexible and universally usable way of charging a mobile terminal of a wireless telecommunication system. Particularly, the charging circuit according to the present invention has the advantage that a mobile terminal for a wireless telecommunication system can be charged at any place of the world with only a single charging circuit. Normal charging cables for mobile terminals are only adapted to the specific power supply system used in the respective country. A USB interface, however, is an internationally used and standardised way of connecting devices to computers.

[0006] Advantageously, the adaptation means of the charging circuit according to the present invention comprises a current limiter to limit the current received from the USB interface to a maximum charging current of the mobile terminal. The current limiter is advantageous in

respect of protection against TDMA bursts and other kinds of bursts used in the mobile terminal for the wireless transmission of data. Further advantageously, the adaptation means comprises a short circuit protection means for protecting the mobile terminal and/or the computer against short circuits. Further advantageously, the adaptation means comprises a voltage regulator for regulating the voltage received from the USB interface to the charging requirements of the mobile terminal.

The voltage regulator is particularly advantageous for stabilising the voltage supplied to the mobile terminal.

[0007] It has to be understood, that in the present application, the expression charging a mobile terminal means charging of the battery or the accumulator of a mobile terminal.

[0008] Further advantageously, the first connection means is a USB cable for connection with a USB port of the computer and the second connection means is a mobile terminal cable for connection with a corresponding data input/output and charge port of the mobile terminal. Here, the charging circuit according to the present invention is an independent device with respective cables for the connection with the computer and the mobile terminal. Alternatively, the charging circuit according to the present invention can be built in the mobile terminal or the computer so that an integrated solution is realised. In further alternative solutions, the charging circuit according to the present invention could have a USB port as the first connection means and/or a respective mobile terminal cable port as the second connection means. Here, standardised cables and plugs could be used as the cable connections between the computer as a charging circuit and the charging circuit and the mobile terminal. A further advantage of this solution is that the charging circuit according to the present invention could be used with different kinds of mobile terminals having different kinds of data input/output and charge ports for the connection with the charging circuit.

[0009] Further, the charging circuit according to the present invention advantageously comprises a data line for transmitting power supply status information from the computer to the mobile terminal. The charging circuit according to the present invention as described above does not necessarily need to enable a data transfer between the computer and the mobile terminal and the conversion and adaptation of power received from the computer to the power requirements for charging the mobile terminal is generally sufficient for the purpose of the present invention. However, the communication of data between the computer and the mobile terminal is necessary for embodiments in which the charging of the mobile terminal is controlled in dependence of the status of the power supply of the computer.

[0010] The above object is further achieved by a mobile terminal for a wireless telecommunication system according to claim 8, which comprises a battery providing power supply, connection means adapted to be con-

nected to a charging circuit of the above described kind, and control means for controlling the charging of the battery from a USB interface of a computer.

[0011] The battery of the mobile terminal according to the present invention which is to be charged by the charging circuit as above described, is for example part of a removable battery pack or accumulator of the mobile terminal. The connection means of the mobile terminal adapted to be connected to the inventive charging circuit is for example a data input/output and charge port of the mobile terminal, which serves also for other purposes, such as connecting a hands free kit or the like. The control means for controlling the charging of the battery is for example the central control microchip or microprocessor of the mobile terminal responsible for controlling the common functionalities. The wireless telecommunication system, in which the mobile terminal according to the present invention operates, can for example be the GSM and/or the UMTS and/or any other wireless telecommunication system.

[0012] Advantageously, the control means of the mobile terminal detects the charge level of the battery and controls the charging of the battery from a USB interface through a connected charging circuit on the basis of the detected charge level. Hereby, the control means advantageously charges the battery if the detected charge level is below a pre-set value. This value can for example be about 5% of the entire battery capacity. In this example of the mobile terminal according to the present invention, charging of the battery is performed only on the basis of the charge level of the battery and no further other information is used. Thus, the charging circuit can be reduced to the pure power conversion and adaptation function in order to deliver the specific voltage and current to the mobile terminal. The charging process is only controlled by the mobile terminal itself and not by the computer or the user. Alternatively, the charging circuit can, additionally to the power lines, comprise data lines for communicating data between the computer and the mobile terminal. In this way, the mobile terminal can be charged via the USB interface, while at the same time the data communication, for example for downloading or uploading data from and to the computer, can be performed.

[0013] In a further alternative example of the mobile terminal according to the present invention, the control means is adapted to receive a power supply status information of a computer through a connected charging circuit and controls the charging of the battery from a USB interface of the computer through the connected charging circuit on the basis of the received power supply status information. Here, charging of the battery of the mobile terminal is performed only if the received power supply status information indicates that the power supply status of the computer allows charging of the battery of the mobile terminal. Advantageously, the control means charges the battery if the received power supply status information indicates that the computer is con-

nected to and powered by an external power supply. In this case, the battery of the mobile terminal is thus charged through the external power supply of the computer in any case in which the battery of the mobile terminal is not fully charged. Further advantageously, the control means is adapted to detect the charge level of the battery and charges the battery if the received power supply status information indicates that the computer is powered by an internal power supply and that the detected charge level is below a pre-set value. The pre-set value is advantageously about 5% of the entire battery capacity. Here, in order to save power for the computer, the battery is only charged if its charge level is so low that there is a risk that the mobile terminal cannot be further operated due to a lack of power. The last case is particularly applicable to mobile computers, such as laptops, notebooks and the like, which have an internal power supply in form of a detachable battery pack, an accumulator or the like. Here it is very important that the power resources of the computer as well as the mobile terminal are carefully controlled to ensure proper operation.

[0014] It is to be noted that in the example of the mobile terminal controlling the charging of its battery on the basis of a power supply status information received from the computer, the computer needs an appropriate driver software which detects the power status of the computer and transmits a corresponding information via the USB interface to the mobile terminal. Hereby, the data line of the charging circuit according to the present invention used for the transmission of the power supply status information between the computer and the mobile terminal can also be used for the communication of download/upload data and the like.

[0015] In the following description, the present invention is explained in more detail in relation to the enclosed only Figure 1, which shows a schematic block diagram of a charging circuit and a mobile terminal according to the present invention being connected to a computer.

[0016] Particularly, Fig. 1 shows a block diagram of a charging circuit 1 according to the present invention for charging a mobile terminal 2 of a wireless telecommunication system through a USB interface of a computer 3. Fig. 1 thereby shows an embodiment in which the charging circuit 1 comprises a connection cable 4 connected to the computer 3 and a connection cable 5 connected to the mobile terminal 2. In another embodiment of the charging circuit 1 according to the present invention, the connection cables 4 and 5 can be separate devices to be detachably connected to the charging circuit 1.

[0017] The connection cable 5 connecting the charging circuit 1 and the computer 3 is a USB data cable (universal serial bus data cable), which comprises at least one data line 4a, one power line 4b and one ground line 4c. The power line 4b is considered for powering USB devices and delivers usually $5V \pm 5\%$ voltage and 500mA/100mA current so that the charging specifica-

tions of most mobile terminals for wireless telecommunication systems, such as the UMTS and/or the GSM system, are met.

[0018] The charging circuit 1 comprises adaptation means for adapting the power received from the USB interface of the computer 3 to the power requirements of the mobile terminal 2 to be charged. The adaptation means hereby comprise a current limiter 6 to limit the current in the power line 4b to the maximum charging current of the mobile terminal 2. The adaptation means further comprise a short circuit protection means 7 for protecting the mobile terminal 2 and/or the computer 3 against short circuits. The voltage received from the USB interface is regulated by a voltage regulator 8 to meet the charging requirements of the mobile terminal 2.

[0019] The connection cable 5 between the charging circuit 1 and the mobile terminal 2 comprises at least one data line 5a which is connected to the data line 4a of the connection cable 4 so that data are communicated between the computer 3 and the mobile terminal 2 via the data line 4a and the data line 5a. The connection cable 5 comprises a connector plug 13 for connection with a input/output and charge board 12 of the mobile terminal 2. Hereby, the power line 5b and the ground line 5c are connected to a battery 11 of the mobile terminal 2. The battery 11 can be an integral battery or a removable battery/accumulator. Further, the data line 5a is herewith connected to a control means 9 of the mobile terminal 2, which is connected to a memory means 10 for storing data and/or software application programs. The control means 9 controls the charging of the battery 11 from the USB interface of the computer 3 through the charging circuit 1.

[0020] The USB interface of the computer 3 is realised in a USB port 17, to which a USB plug 18 of the connection cable 4 of the charging circuit 1 is connected. Hereby, the power line 4b and the ground line 4c are connected to either an internal battery/accumulator 15 of the computer means 3 or to an external power supply socket 16, to which an external power source for the computer 3 can be connected. Thus, the battery 11 of the mobile terminal 2 is either charged from the internal battery/accumulator 15 of the computer 3 or an external power supply connected to the external power supply socket 16 of the computer 3.

[0021] The control means 9 of the mobile terminal 2 can control the charging process of the battery 11 in two ways. The first way is that the charging process is exclusively controlled by the control means 9, which, after detection that the mobile terminal 2 is connected to a USB interface of a computer 3 and that the battery level of the battery 11 is below a pre-set value starts to charge the battery 11. The charging circuit 1 will then deliver the specific voltage and current through the power lines 4b, 5b and the ground lines 4c, 5c to the battery 11. The current limiter and the voltage regulator are thereby set to the specific power requirements of the battery 11. In

case that the charging circuit 1 is to be used with different kinds of mobile terminals 2, the necessary current and voltage values could for example be externally set by a user through a corresponding input means to the charging circuit 1. The power control software for controlling the charging of the battery is implemented in the memory 10 of the mobile terminal 2 and used by the control means 9 for detecting if the mobile terminal 2 is connected to an USB interface of a computer 3, to detect the charge level of the battery 11 and to control the charging process correspondingly. The pre-set value, from which charging of the battery 11 starts, can for example be 5% of the entire battery capacity. The control means 9 is for example a microchip or a microprocessor of the mobile terminal 2 which also controls other important functions of the mobile terminal.

[0022] In a second way of controlling the charging process of the battery 11 of the mobile terminal 2, the control means 9 receives a power supply status information of the computer 3 through the data lines 4a and 5a and controls the charging of the battery on the basis of the received power supply information. The power supply status information received from the computer 3 indicates if the computer 3 is connected to an internal battery/accumulator 15 or to an external power supply via the external power supply socket 16. The power supply status information is thereby detected in the computer 3 by a control means 14 and supplied via the data line 4a and the data line 5a to the control means 9 of the mobile terminal 2. In case that the received power supply status information indicates that the computer 3 is connected to an external power supply, the control means 9 charges the battery 11 independent of its charge level. If, on the other hand, the power control status information indicates that the computer 3 is only connected to and powered by an internal power supply, such as the battery/accumulator 15, the control means 9 detects the charge level of the battery 11 and only starts charging of the battery 11 via the charging circuit 1 if the charge level is below a pre-set value, as for example 5% of the entire battery capacity. Here, the control means 14 of the computer 3 may for example use the Microsoft Power Manager and a further special software application, as for example a USB data cable driver, to detect the power supply status of the computer 3 and supply a corresponding power status information to a connected mobile terminal 2. Each time a USB cable, as for example a connection cable 4 of the charging circuit 1 is connected to the USB port 17 of the computer 3, the USB data cable driver will start automatically and activate the Microsoft Power Manager to get the status of the power supply of the computer 3. After the USB cable is disconnected, the USB data cable driver will be automatically closed. Thus, no further special applications or software is needed on the computer 3 and the charging circuit 1 can be used as a so-called plug and play device. Further, the USB data cable driver only runs when a USB data cable is connected to the USB port

17, instead running the whole time in the background. Hereby, computer resources are saved. The USB data cable driver could also protect itself at queuing and sending power supply information to a mobile terminal 2 by other drivers of other manufacturers.

[0023] The present invention is particularly advantageous, since the battery 11 of the mobile terminal 2 can be charged while the user works on the basis of the data connection between the mobile terminal 2 and the computer 3, for example while down- or uploading data or the like.

Claims

1. Charging circuit (1) for charging a mobile terminal (2) of a wireless telecommunication system through a USB interface of a computer (3), with first connection means (4) for connection with the USB interface of a computer (3), second connection means (5) for connection with a mobile terminal (2) to be charged, and

adaptation means (6, 7, 8) for adapting power received from said USB interface to the power requirements of a mobile terminal to be charged.

2. Charging circuit (1) according to claim 1, **characterized in,** that said adaptation means comprises a current limiter (6) to limit the current received from the USB interface to a maximum charging current of the mobile terminal (2).

3. Charging circuit (1) according to claim 1 or 2, **characterized in,** that said adaptation means comprises a short circuit protection means (7) for protecting the mobile terminal (2) and/or the computer (3) against short circuits.

4. Charging circuit (1) according to claim 1, 2 or 3, **characterized in,** that said adaptation means comprises a voltage regulator (8) for regulating the voltage received from the USB interface to the charging requirements of the mobile terminal (2).

5. Charging circuit (1) according to one of the claims 1 to 4, **characterized in,** that said first connection means (4) is a USB cable for connection with a USB port (17) of the computer and said second connection means (5) is a mobile terminal cable for connection with a corresponding data input/output and charge port (12) of the mobile terminal (2).

6. Charging circuit (1) according to one of the claims

1 to 5,

characterized by

a data line (4a, 5a) for transmitting power supply status information from the computer (3) to the mobile terminal (2).

8. Mobile terminal (2) for a wireless telecommunication system, comprising

a battery (11) providing power supply, connection means (12) adapted to be connected to a charging circuit (1) according to one of the claims 1 to 6, and

control means (9) for controlling the charging of the battery (11) from a USB interface of a computer (3).

9. Mobile terminal (2) according to claim 8,

characterized in,

that the control means (9) detects the charge level of the battery (11) and controls the charging of the battery (11) from a USB interface through a connected charging circuit (1) on the basis of the detected charge level.

10. Mobile terminal (2) according to claim 9,

characterized in,

that the control means (9) charges said battery (11) if the detected charge level is below a preset value.

11. Mobile terminal (2) according to claim 10,

characterized in,

that the control means (9) charges said battery if the detected charge level is below about 5% of the entire battery capacity.

12. Mobile terminal (2) according to claim 8,

characterized in,

that the control means (9) is adapted to receive a power supply status information of a computer (3) through a connected charging circuit (1) and controls the charging of the battery from a USB interface of the computer (3) through the connected charging circuit (1) on the basis of the received power supply status information.

13. Mobile terminal (2) according to claim 12,

characterized in,

that the control means (9) charges said battery if the received power supply status information indicates that the computer (3) is connected to an external power supply.

14. Mobile terminal (2) according to claim 12 or 13,

characterized in,

that the control means (9) is adapted to detect the charge level of said battery and charges said battery if the received power supply status information

indicates that the computer (3) is powered by an internal power supply and that the detected charge level is below a preset value.

15. Mobile terminal (2) according to claim 14, characterized in, that the preset value is about 5% of the entire battery capacity.

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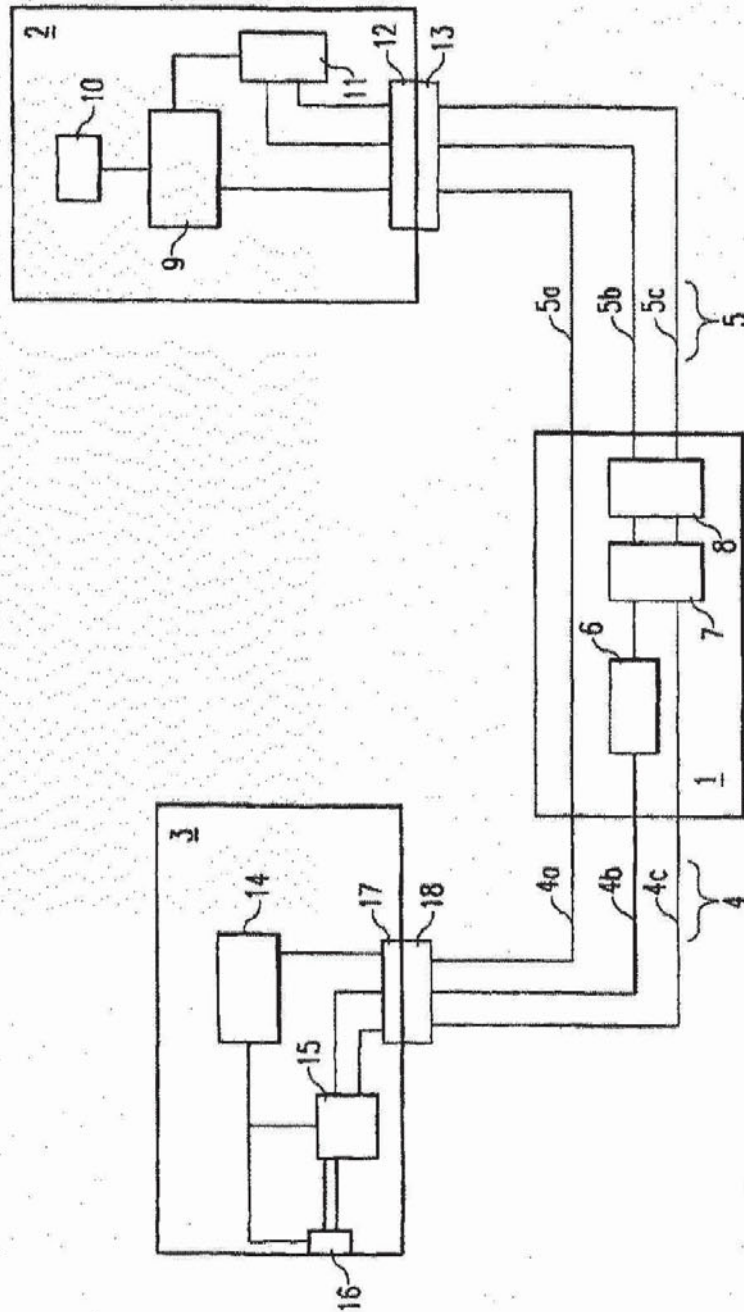


Fig. 1



European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 12 2142

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	DE 200 04 691 U (YANG WEN CHIN) 29 June 2000 (2000-06-29) * page 1, paragraph 3 - paragraph 4 *	1,3-5, 8-10	H02J7/00
Y	* page 4, line 28 - line 30 *	6,12	
Y	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 12, 31 October 1998 (1998-10-31) & JP 10 201127 A (NEC CORP), 31 July 1998 (1998-07-31) * abstract *	6,12	
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 09, 13 October 2000 (2000-10-13) & JP 2000 165513 A (KYOCERA CORP), 16 June 2000 (2000-06-16) * abstract *	6,12-14	
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 04, 31 August 2000 (2000-08-31) & JP 2000 020176 A (MINOLTA CO LTD), 21 January 2000 (2000-01-21) * abstract *	12-14	
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 08, 6 October 2000 (2000-10-06) & JP 2000 139032 A (KYOCERA CORP), 16 May 2000 (2000-05-16) * abstract *	1-15	TECHNICAL FIELDS SEARCHED (Int.Cl.7) H02J H01M H04B H04M

The present search report has been drawn up for all claims

Place of search THE HAGUE	Date of completion of the search 13 March 2001	Examiner Moyle, J
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<p>CATEGORY OF CITED DOCUMENTS</p> <p>X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document</p>	<p>T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application I: document cited for other reasons &: member of the same patent family, corresponding document</p>
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EPO FORM 1503 (3.6.02) (IP/C/01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 12 2142

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

13-03-2001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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JP 10201127 A	31-07-1998	JP 3085226 B	04-09-2000
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82



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TSO, EDWARD H

ART UNIT PAPER NUMBER

2838

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	11/175,885	FISCHER ET AL.	
	Examiner	Art Unit	
	Edward H. Tso	2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 January 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date, _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
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Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |