

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:

NEW ASSIGNMENT

NATURE OF CONVEYANCE:

ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
McMicking Ventures I	01/20/2004

RECEIVING PARTY DATA

Name:	Powerlinx, Inc.
Street Address:	200 Madonna Blvd
City:	Tierra Verde
State/Country:	FLORIDA
Postal Code:	33715

PROPERTY NUMBERS Total: 4

Property Type	Number
Patent Number:	6275144
Patent Number:	6519328
Patent Number:	6449318
Patent Number:	6842519

CORRESPONDENCE DATA

Fax Number: (503)439-6073
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ATTORNEY DOCKET NUMBER:

G001

NAME OF SUBMITTER:

Mark C. Van Ness, Reg No. 39,865

Total Attachments: 16

PATENT

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REEL: 017492 FRAME: 0887

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AGREEMENT FOR ACQUISITION OF INTANGIBLE ASSETS

This AGREEMENT FOR ACQUISITION OF INTANGIBLE ASSETS (the "Agreement") is entered into as of 20th day of January 2004 (the "Effective Date") by and between PowerLinx, Inc., a Nevada corporation ("Buyer") and McMicking Ventures I, a corporation (the "Seller"), with respect to the following facts: CALIFORNIA LIMITED PARTNERSHIP

WHEREAS, the Seller is the owner of the patents, intellectual property, programs, software and goodwill utilized in connection therewith, collectively referred to herein as the ("Intangible Assets") as described in Exhibit "B";

WHEREAS, Buyer wishes to purchase the Intangible Assets from the Seller.

NOW, THEREFORE, for good and valuable consideration, the receipt and legal sufficiency of which is hereby acknowledged, the parties hereto covenant and agree as follows:

1. Transfer and Assignment. The Seller hereby agrees to assign, transfer and convey to Buyer all of the Seller's right, title and interest in and to the Intangible Assets. The Seller shall deliver an Irrevocable Assignment to perfect the transfer of the Intangible Assets, in the form of the attached as Exhibit "A."
2. No Assumption of Liabilities. Buyer does not assume and shall not be deemed to have assumed or be responsible for any debts, liabilities or obligations of the Seller in connection with the Intangible Assets or otherwise of any kind or character whatsoever, whether accrued, absolute, contingent or otherwise.
3. Consideration. In consideration for transfer of the Intangible Assets to Buyer, Buyer will issue to the Seller shares of its common stock valued at \$150,000 based on the previous 20 day average closing price of the common stock prior to the date of this agreement. (the "Common Stock"). The Common Stock will be restricted and will be included in the Buyer's next registration statement. The Buyer will adjust with additional free trading shares the Seller's Common Stock upon the sooner of (i) one year from the date of this agreement; or (ii) on the effective date of a registration statement covering the Common Stock, in the event the price per share of the Buyer's common stock is below the 20 day average closing price of the common stock prior to the date of this agreement.
4. Reversion Upon Bankruptcy. The Buyer accepts the assignment of all the rights, titles, and interest in and to the Intangible Assets on the condition that the Intangible Assets shall revert back to Seller in the event the Buyer files for bankruptcy within two (2) yrs of the execution of this agreement.

5. Representations and Warranties of the Seller. The Seller hereby covenants, represents and warrants as follows:

- a) Authority and Consents. The Seller has the right, power, legal capacity and authority to enter into and perform its obligations under this Agreement and no approvals or consents of any person or entity is necessary in connection therewith. This Agreement, when executed and delivered, shall constitute a legal, valid and binding obligation of the Seller enforceable against it in accordance with its terms.
- b) Title to Intangible Assets. The Seller acquired title to the Intangible Assets by purchasing the Intangible Assets in a transaction authorized and approved by the bankruptcy court for Telenetworks, Inc. The Seller has good and marketable title to the Intangible Assets. To the best of the Seller's knowledge, all such Intangible Assets are free and clear of restrictions on or conditions to transfer or assignment, and are free and clear of mortgages, liens, pledges, charges, encumbrances, equities, or claims of any kind or manner.
- c) Conflicts. The Seller has no actual knowledge (without any duty to inquire) that the Intangible Assets are patentable, enforceable, or that they conflict with or violate any other patent, whether pending or issued.
- d) Litigation, Claims. To the best of the Seller's knowledge, there are no actions, suits, proceedings, arbitrations, investigations or claims pending or, to the knowledge of the Seller, threatened against or affecting the Seller in connection with the Intangible Assets.
- e) Taxes. The Seller has filed all applicable tax filings, has paid or will pay all taxes and deposits in a timely manner, and there are no claims or grounds for a claim by any taxing authority which could be asserted against Seller or against Buyer as transferee of the Intangible Assets.
- f) Information on Buyer. The Seller has been furnished with the Buyer's Form 10-KSB for the year ended December 31, 2002 as filed with the Securities and Exchange Commission (the "Commission") together with all subsequently filed forms 10-QSB, 8-K, and other publicly available filings made with the Commission (hereinafter referred to collectively as the "Reports"). In addition, the Seller has received from the Buyer such other information concerning its operations, financial condition and other matters as the Seller has requested in writing (such information in writing is collectively, the "Other Written Information"), and considered all factors the Seller deems material in deciding on the advisability of investing in the Securities.
- g) Information on Seller. The Seller is an "accredited investor", as such term is defined in Regulation D promulgated by the Commission under the Securities Act of 1933, as amended (the "1933 Act"), is experienced in investments and business matters, has made investments of a speculative nature and has purchased securities of United States publicly-owned companies in private placements in the past and, with its representatives, has such knowledge and experience in financial, tax and other business matters as to enable the Seller to utilize the information made available by the Buyer to evaluate the merits and risks of and to make an informed investment

decision with respect to the proposed purchase, which represents a speculative investment. The Seller has the authority and is duly and legally qualified to purchase and own the Securities. The Seller is able to bear the risk of such investment for an indefinite period and to afford a complete loss thereof. The information set forth on the signature page hereto regarding the Seller is accurate.

- h) Purchase of Common Stock. On the Effective Date, the Seller will receive the Common Stock for its own account and not with a view to any distribution thereof.
- i) Compliance with Securities Act. The Seller understands and agrees that the Securities have not been registered under the 1933 Act, by reason of their issuance in a transaction that does not require registration under the 1933 Act (based in part on the accuracy of the representations and warranties of the Seller contained herein), and that such Securities must be held, for a period of one (1) year, unless a subsequent disposition is registered under the 1933 Act or is exempt from such registration.
- j) Legend. The Common Stock shall bear the following legend, unless same shall have been included in an effective registration statement under the 1933 Act:

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. THESE SHARES MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER SUCH SECURITIES ACT OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO POWERLIXX VIDEO TECHNOLOGY, INC. THAT SUCH REGISTRATION IS NOT REQUIRED."

6. Buyer's Representations and Warranties

- a) Buyer is a corporation duly organized, existing and in good standing under the laws of the State of Nevada. The Buyer has the right, power, legal capacity and authority to enter into and perform its obligations under this Agreement and no approvals or consents of any person or entity is necessary in connection therewith. This Agreement, when executed and delivered, shall constitute a legal, valid and binding obligation of the Buyer enforceable against it in accordance with its terms.
- b) Buyer acknowledges that, except as provided in Section 5(c), Seller is making no representation or warranty that any of the Intangible Assets are patentable, enforceable, or that they conflict with or violate any other patent, whether pending or issued.

7. Indemnification. Buyer and Seller agree to indemnify, defend, and hold each other and their respective officers, directors, and agents harmless from and against any and all claims, demand, liabilities, actions, or causes of action arising out of or pertaining to the breach of either party's respective representations or warranties contained in this Agreement. Seller's liability under this Agreement shall be limited to the shares that are being issued pursuant to the Agreement or to any consideration realized by Seller upon the sale of such shares.
8. Entire Agreement; Modification. This Agreement and the exhibits referenced herein constitute the entire agreement between the parties pertaining to the subject matter contained in it and supersedes all prior and contemporaneous agreements, representations and understandings of the parties. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing by all the parties.
9. Notices. All notices, requests, demands and other communications under this Agreement shall be in writing and shall be deemed to have been duly given on the date of service if served personally on the party to whom notice is to be given, or on the fifth (5th) day after mailing if mailed to the party to whom notice is to be given, by first class mail, registered or certified, postage prepaid and properly addressed as follows:

To the Seller: Henry C. McMicking

To Buyer: PowerLinux, Inc.

Any party may change its address for purposes of this paragraph by giving the other parties written notice of the new address in the manner set forth above.

10. Payment of Expenses and Construction. Each party to this Agreement shall be responsible for, and shall pay, all of its own fees and expenses, including those of its counsel, incurred in the negotiation, preparation and consummation of this Agreement and the transactions described herein. The parties to this Agreement are represented by counsel. This Agreement, and related agreements executed in connection with this Agreement, shall not be construed against any party on the basis that such party or its agents drafted parts of, or the entirety of such documents.
11. Severability. If any provision of this Agreement is held invalid or unenforceable by any court of final jurisdiction, it is the intent of the parties that all other provisions of this Agreement be construed to remain fully valid, enforceable and binding on the parties.
12. Binding Effect. This Agreement shall bind and inure to the benefit of each party hereto and their respective successors, heirs and assigns.
13. Counterparts. This Agreement may be executed simultaneously in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement may be executed by facsimile, with originals to follow by overnight courier.
14. Governing Law. This Agreement shall be construed in accordance with, and governed by, the internal laws of the State of Nevada.
15. Incorporation. All exhibits hereto are incorporated in whole by this reference.

16. Authority of Parties. Each party signing this agreement on behalf of another person or entity warrants to the other parties that he or she is fully authorized to do so, and that his or her signing of the agreement will bind the party for whom he or she is signing to the terms of this agreement

IN WITNESS WHEREOF, the parties have executed this Agreement for Acquisition of Intangible Assets as of the date first written above.

The Seller

MCMICKING VENTURES I

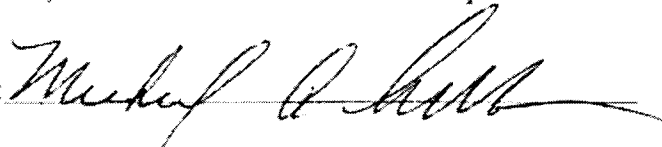
By: MCMICKING AND CO. LLC as general partner

By: 

Henry C. McMicking, Managing Member

Buyer:

POWERLINX, INC POWERLINX a Nevada corporation

By: 

Michael Ambler

Title: President and COO [Signature Page to

Agreement for Acquisition of Intangible Assets]

EXHIBIT "A"
ASSIGNMENT

WHEREAS, McMicking Ventures I (the "Seller" or "Assignor"),

WHEREAS, the PowerLinx, Inc. a Nevada ("POWERLINX" or "Assignee") has entered into that certain Agreement for Acquisition of Assets, dated as of January 20, 2004 (the "Agreement") and incorporated in whole by this reference;

WHEREAS, Assignor desires to assign all of its rights, title and interest in the "Assigned Intellectual Property Rights" as described in Exhibit "B".

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the aforesaid Assignor has sold, assigned and transferred, and by these presents does hereby sell, assign and transfer unto POWERLINX the full and exclusive right, title and interest in and to the Assigned Intellectual Property Rights in the United States of America and in its colonies, territories and dependencies and also in all countries foreign to the United States of America, the same to be held and enjoyed irrevocably by POWERLINX for its own use, and for the use of its successors, assigns or other legal representatives.

Assignor hereby represents that it has not heretofore transferred, assigned or otherwise conveyed any interest in the Assigned Intellectual Property Rights to any third party in any manner whatsoever.

Assignor hereby authorize POWERLINX and its successors to apply for a patent or patents, a trademark or trademarks, a servicemark or servicemarks, or a copyright or copyrights, directly in its own name, upon the Assigned Intellectual Property Rights and wherever the same is permitted by law (both in the United States and foreign jurisdictions), and Assignor also assigns, sells, transfers and sets over to POWERLINX and its successors all priority rights. Assignor further covenants to execute all additional instruments and do all things necessary for carrying out the purpose of this instrument, including, without limitation, execution of all documents or instruments necessary to apply for a patent or patents, a trademark or trademarks, a servicemark or servicemarks, or a copyright or copyrights, directly in the name of POWERLINX.

POWERLINX accepts the assignment of all the rights, titles, and interest in and to the Intangible Assets on the condition that the Intangible Assets shall revert back to Assignor in the event the POWERLINX files for bankruptcy within two (2) yrs of the execution of this agreement.

POWERLINX acknowledges that, except as provided in Section 5(c), Assignor has made no representation or warranty that the Intangible Assets are patentable, enforceable, or that they conflict with or violate any other patent, whether pending or issued.

This Assignment shall be effective for all purposes as of January 20, 2004.

All defined terms utilized in this Irrevocable Assignment Agreement shall have the meanings ascribed to them in the Agreement unless otherwise indicated.

IN WITNESS WHEREOF, the Assignors have caused this Assignment to be signed this 20th day of January 2004.

MCMICKING VENTURES I

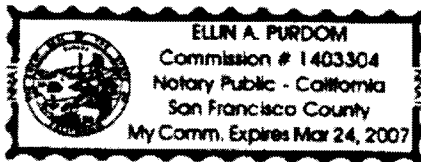
By: MCMICKING AND CO. LLC as general partner____

By: [Signature]
Henry C. McMicking, Managing Member

STATE OF California)
County of San Francisco) ss.

On January 21, 2004 before me, Ellin A. Purdom, Notary Public,
personally appeared HENRY C. McMicking personally known to me, or
proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the
within instrument and acknowledged to me that he executed the same in his authorized capacity and
that by his signature on the instrument the person or the entity upon behalf of which the person
acted, executed the instrument.

WITNESS my hand and official seal.



Notary Public

[Signature]

[Signature Page to Irrevocable Assignment]

EXHIBIT B

TELENETWORK, INC.

ISSUED AND PENDING PATENTS

Prepared by Blakely, Sokoloff, Taylor & Zafman LLP

11/17/03

- 1) U.S. Patent No. 6,275,144 issued August 14, 2001 for:
"VARIABLE LOW FREQUENCY OFFSET, DIFFERENTIAL, OOK, HIGH-SPEED
POWER-LINE COMMUNICATION"

Assignee: Telenetwork, Inc.

Inventor: Stephen Roy Rumbaugh

Our Ref.: 04096.P001

Abstract:

A method and system for transmitting data using a low frequency offset, differential voltage, OOK transmission technique have been described. According to one embodiment, an analog or digital signal is sent or received and converted, if necessary, into or from serial format onto or out of a power line. This signal is an OOK modulated sinusoidal offset signal with an associated differential voltage. Next, the transmitted signal is input into an additive coupler which serves as an interface to the power-line network. At the far end, an additive decoupler receives the transmission and sends the frequency out to the designated amplifiers to provide the needed voltages to activate the OOK detection system. This system uses current detection that is activated every time the designated OOK signal frequency is received. Further, the OOK signal is decoded and information split off to the designated leads. Afterwards, the recreated square wave transmission serial bit stream is converted to compatible signaling voltages and sent to the digital computer interface.

Claims:

1. A method for transmitting data using a differential voltage, frequency offset, OOK transmission, the method comprising:

receiving a data signal from a data source device;

providing a base frequency carrier;

controlling states of the base frequency carrier, the carrier states including an on state and an off state;

transmitting the data signal, using the base frequency carrier, to a power line via one of a pair of couplers, the pair of couplers corresponding to an active power line state and a passive power line

state,

receiving the transmitted data signal from the power line by one of a pair of decouplers, the pair of decouplers corresponding to the active power line state and the passive power line state; and

sending the data signal to a data receiving device.

2. The method of claim 1 wherein the passive power line state is detected when power in the power line is turned off and the active power line state is detected when the power in the power line is turned on.

3. The method of claim 1 further comprising transmitting control and timing information within a serial bit stream.

4. The method of claim 1 wherein the data signal is transmitted from the data source device to the data receiving device via the power line at a rate equal to an output rate of the data source device plus a transmission control overhead.

5. The method of claim 1 wherein a frequency of the base frequency carrier is set according to a minimum signal to noise ratio.

6. The method of claim 1 wherein the data signal is transmitted using the base frequency carrier as a forward biased low frequency wave.

7. A transmission system for transmitting data from a data source device to a data receiving device via a power line using a differential voltage, frequency offset, OOK transmission, the system comprising

a transmitter to receive a data signal from the data source device, to provide a base frequency carrier, to control states of the base frequency carrier, the carrier states including an on state and an off state, and to transmit the data signal, using the base frequency carrier, to the power line via one of a pair of couplers, the pair of couplers corresponding to an active power line state and a passive power line state; and

a receiver, coupled to the transmitter, to receive the transmitted data signal from the power line by one of a pair of decouplers, the pair of decouplers corresponding to the active power line state and the passive power line state, and to send the data signal to a data receiving device.

8. The system of claim 7 wherein the passive power line state is detected when power in the power line is turned off and the active power line state is detected when the power in the power line is turned on.

9. The system of claim 7 wherein the transmitter is to transmit control and timing information within a serial bit stream.

10. The system of claim 7 wherein the transmitter is configured to transmit the data signal to the data receiving device via the power line at a rate equal to an output rate of the data source device plus a transmission control overhead.

11. The system of claim 7 wherein a frequency of the base frequency carrier is set according to a minimum signal to noise ratio.

12. The system of claim 7 wherein the data signal is transmitted using the base frequency carrier as a forward biased low frequency wave.

- 2) **U.S. Patent No. 6,519,328 issued February 11, 2003 for:**
"VARIABLE LOW FREQUENCY OFFSET, DIFFERENTIAL, OOK, HIGH-SPEED
TWISTED PAIR COMMUNICATION USING TELEPHONE LOAD COILS"

Assignee: Telenetwork, Inc.

Inventor: Stephen Roy Rumbaugh

Our Ref.: 04096.P002

Abstract:

A method and system for transmitting data over loaded twisted pair copper wires using a low frequency offset, differential voltage, on-off keying (OOK) transmission technique are described. According to one embodiment, an analog or digital signal is sent or received and converted, if necessary, into or from serial format onto or out of a loaded twisted pair copper wire. The signal uses an OOK modulated sinusoidal offset signal with an associated differential voltage. A floating reference ground set positive or negative for the differential nature of the transmission may be required. The OOK modulated offset low frequency is being keyed to the floating ground reference that is set to a minimum signal to noise ratio (SNR) level. The SNR level may be set by adjusting the voltage separation between floating ground and the offset of the sinusoidal low frequency wave. The amplitude of the sinusoidal wave may be adjusted to provide increased transmission distance and better SNR. In addition, an encoding scheme may be used to incorporate all signaling and control information within the serial transmission.

Claims:

1. A method for transmitting data over a loaded twisted pair network using a differential voltage, frequency offset, OOK transmission, the method comprising:

receiving a data signal from a data source device;

providing a base frequency carrier,

controlling states of the base frequency carrier, the carrier states including an on state and an off state;

transmitting the data signal, using the base frequency carrier, to a loaded twisted pair wire via a twisted pair coupler and a coupler relay, the coupler relay transmitting the data signal when power in the loaded twisted pair wire is lost;

receiving the transmitted data signal from the loaded twisted pair wire via a twisted pair decoupler and a decoupler relay, the decoupler relay receiving the data signal when the power in the loaded twisted pair wire is lost; and

sending the data signal to a data receiving device.

2. The method of claim 1 further comprising transferring the data signal to a POTS analog connection for emergency services when power in the loaded twisted pair network is turned off.

3. The method of claim 1 further comprising transmitting control and timing information within a serial bit stream.

4. The method of claim 1 wherein the data signal is transmitted from the data source device to the data receiving device over the loaded twisted pair network at a rate equal to an output rate of the data source device plus a transmission control overhead

5. The method of claim 1 wherein a frequency of the base frequency carrier is set according to a minimum signal to noise ratio.

6. The method of claim 1 wherein the data signal is transmitted using the base frequency carrier as a forward biased low frequency wave

7. A transmission system for transmitting data from a data source device to a data receiving device over a loaded twisted pair network using a differential voltage, frequency offset, OOK transmission, the system comprising:

a transmitter to receive a data signal from the data source device, to provide a base frequency carrier, to control states of the base frequency carrier, the carrier states including an on state and an off state, and to transmit the data signal, using the base frequency carrier, to a loaded twisted pair wire via a twisted pair coupler and a coupler relay, the coupler relay transmitting the data signal when power in the loaded twisted pair wire is lost; and

a receiver, coupled to the transmitter, to receive the transmitted data signal from the loaded twisted pair wire via a twisted pair decoupler and a coupler relay, the decoupler relay receiving the data signal when power in the loaded twisted pair wire is lost, and to send the data signal to a data receiving device.

8. The system of claim 7 wherein the transmitter is configured to transfer the data signal to a POTS

analog connection for emergency services using an AC relay when power in the loaded twisted pair network is turned off.

9. The system of claim 7 wherein the transmitter is configured to transmit control and timing information within a serial bit stream.

10. The system of claim 7 wherein the transmitter is configured to transmit the data signal to the data receiving device over the loaded twisted pair network at a rate equal to an output rate of the data source device plus a transmission control overhead.

11. The system of claim 7 wherein a frequency of the base frequency carrier is set according to a minimum signal to noise ratio.

12. The system of claim 7 wherein the data signal is transmitted using the base frequency carrier as a forward biased low frequency wave.

3) U.S. Patent No. 6,449,318 issued September 10, 2002 for:

**"VARIABLE LOW FREQUENCY OFFSET, DIFFERENTIAL, OOK, HIGH-SPEED
TWISTED PAIR COMMUNICATION"**

Assignee: Telenetwork, Inc.

Inventor: Stephen Roy Rumbaugh

Our Ref.: 04096.P003

Abstract:

A method and system for transmitting data over twisted pair copper wires using a low frequency offset, differential voltage, on-off keying (OOK) transmission technique are described. According to one embodiment, an analog or digital signal is sent or received and converted, if necessary, into or from serial format onto or out of a twisted pair. The signal uses an OOK modulated sinusoidal offset signal with an associated differential voltage. A floating reference ground set positive or negative for the differential nature of the transmission may be required. The OOK modulated offset low frequency is being keyed to the floating ground reference that is set to a minimum signal to noise ratio (SNR) level. The SNR level may be set by adjusting the voltage separation between floating ground and the offset of the sinusoidal low frequency wave. The amplitude of the sinusoidal wave may be adjusted to provide increased transmission distance and better SNR. In addition, an encoding scheme may be used to incorporate all signaling and control information within the serial transmission. Next, the transmitted signal is input into a coupler that interfaces it to the twisted pair network. At the far end, a decoupler receives the transmission and sends the OOK sinusoidal signal out to designated amplifiers to provide voltages needed for activating an OOK detection system. The OOK detection system may use current detection that is activated every time

the designated OOK signal frequency is received. Clocking may be recovered using a digital phase lock loop. Further, the OOK signal is decoded and information split off to designated leads. Afterwards, the recreated square wave transmission serial bit stream is converted to compatible signaling voltages and sent to a digital computer interface.

Claims:

1. A method for transmitting data over a twisted pair network using a differential voltage, frequency offset, OOK transmission, the method comprising:

receiving a data signal from a data source device;

providing a base frequency carrier;

controlling states of the base frequency carrier, the carrier states including an on state and an off state,

transmitting the data signal, using the base frequency carrier, to a twisted pair wire via a twisted pair coupler;

receiving the transmitted data signal from the twisted pair wire by a twisted pair decoupler; and

sending the data signal to a data receiving device.

2. The method of claim 1 further comprising transferring the data signal to a POTS analog connection for emergency services when power in the twisted pair network is turned off.

3. The method of claim 1 further comprising transmitting control and timing information within a serial bit stream.

4. The method of claim 1 wherein the data signal is transmitted from the data source device to the data receiving device over the twisted pair network at a rate equal to an output rate of the data source device plus a transmission control overhead.

5. The method of claim 1 wherein a frequency of the base frequency carrier is set according to a minimum signal to noise ratio.

6. The method of claim 1 wherein the data signal is transmitted using the base frequency carrier as a forward biased low frequency wave.

7. A transmission system for transmitting data from a data source device to a data receiving device over a twisted pair network using a differential voltage, frequency offset, OOK transmission, the system comprising:

a transmitter to receive a data signal from the data source device, to provide a base frequency carrier, to control states of the base frequency carrier, the carrier states including an on state and an off state, and to transmit the data signal, using the base frequency carrier, to a twisted pair wire via a twisted pair coupler; and

a receiver, coupled to the transmitter, to receive the transmitted data signal from the twisted pair wire by a twisted pair decoupler and to send the data signal to a data receiving device.

8. The system of claim 7 wherein the transmitter is configured to transfer the data signal to a POTS analog connection for emergency services using an AC relay when power in the twisted pair network is turned off.

9. The system of claim 7 wherein the transmitter is configured to transmit control and timing information within a serial bit stream.

10. The system of claim 7 wherein the transmitter is configured to transmit the data signal to the data receiving device over the twisted pair network at a rate equal to an output rate of the data source device plus a transmission control overhead.

11. The system of claim 7 wherein a frequency of the base frequency carrier is set according to a minimum signal to noise ratio

12. The system of claim 7 wherein the data signal is transmitted using the base frequency carrier as a forward biased low frequency wave.

4) U.S. Patent Application Serial No. 09/843,999 filed April 27, 2001 for:

"COMMUNICATION WITH CURRENT DETECTION"

Assignee: Telcnetwork, Inc.

Inventors: Stephen Roy Rumbaugh, Garth Wayne Haslam

BSTZ Ref.: 04096.P009

Abstract:

Apparatuses and methods are disclosed for communications using current detection. According to one embodiment, a transmitter generates a signal on a transmission line by switching between two power sources. According to one embodiment, the transmitted signal is a balanced signal. Under an embodiment, a signal that has been transmitted on the transmission line is received by a receiver that includes a current detector, and the receiver detects the signal by sensing changes in current on the transmission line. According to one embodiment, the current detector includes a sensor that senses changes in the magnetic field generated by changes in current in the transmission line.

Drawings and Images: All engineering drawings, photographs of models, computer renderings or other images or drawings related to the above-referenced patents.

Software and Programs: All software and programs related to the above-referenced patents.