# **EXHIBIT 1024**



## United States Patent [19]

#### Puvogel

[11] Patent Number:

4,733,389

[45] Date of Patent:

Mar. 22, 1988

[54]	DROP CABLE FOR A LOCAL AREA NETWORK		
[75]	Inventor:	Joh	ın M. Puvogel, Lawndale, Calif.
[73]	Assignee:	Xei	rox Corporation, Stamford, Conn.
[21]	Appl. No.:	890	),210
[22]	Filed:	Jul	. 28, 1986
	U.S. Cl		
[56]	References Cited		
U.S. PATENT DOCUMENTS			
			Osborne

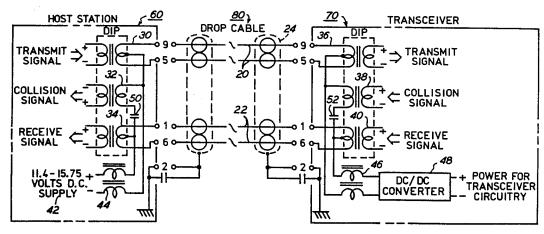
FOREIGN PATENT DOCUMENTS
0198932 10/1986 European Pat. Off. ....... 370/5

Primary Examiner—Douglas W. Olms Attorney, Agent, or Firm—Franklyn C. Weiss

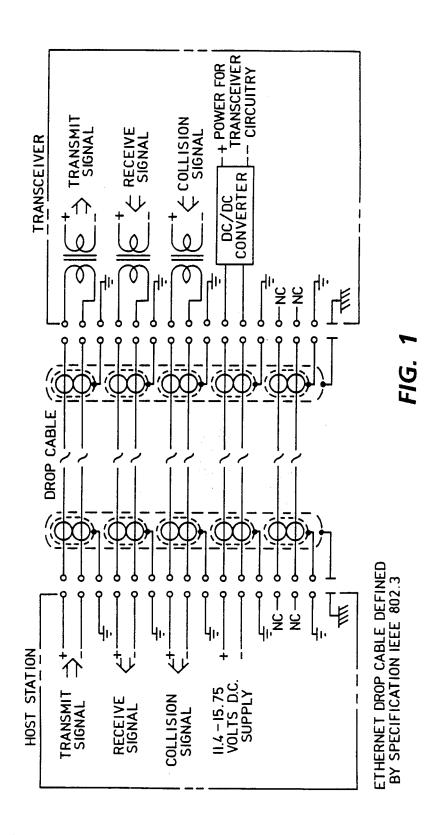
[57] ABSTRACT

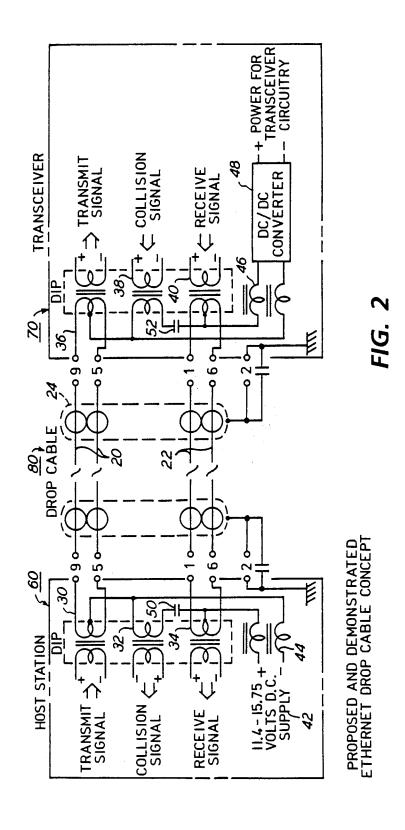
A multipoint data communication system is disclosed for transmitting data to and from a plurality of communicating devices via an interconnecting cable. This interconnecting drop cable couples a transceiver unit to a communicating device, such as a personal computer, workstation, printer, or the like. The drop cable herein has only two twisted, jointly shielded, pairs of wires to transmit the three signals (transmit, receive, collision) and power. AC differences in the pairs constitute the third, phantom, signal channel. DC differences in the pairs provide the power source for transceiver operations. This cable is considerably less expensive than the industry standard cable.

2 Claims, 6 Drawing Figures

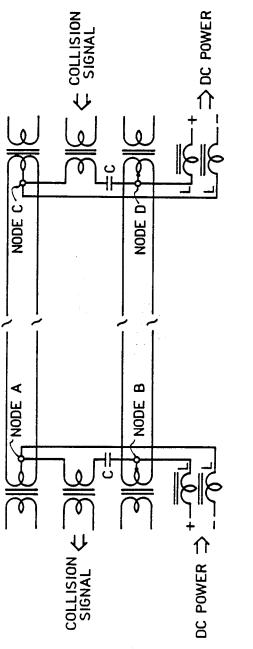


PROPOSED AND DEMONSTRATED ETHERNET DROP CABLE CONCEPT





U.S. Patent



# DOCKET

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

# **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

# **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

#### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

#### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

#### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

### **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

