

# dictionary of communications technology

third edition

gilbert held

everything

**you didn't know you needed to know**

about Communications Technology

Apple Inc. v. Rembrandt Wireless Technologies, LP, IPR2020-00033

Page 1 of 9

First edition published in 1989 as *Data and Computer Communications*  
Copyright© 1995, 1996, 1998 by John Wiley & Sons Ltd.

Baffins Lane, Chichester  
West Sussex, PO 19 1UD, England

National 01243 779777

International (+44) 1234 779777

e-mail (for orders and customer service enquiries): [cs-books@wiley.co.uk](mailto:cs-books@wiley.co.uk)

Visit our Home Page on <http://www.wiley.co.uk> or <http://www.wiley.com>

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except under the terms of the Copyright, Designs and Patents Act 1988 or under the terms of a licence issued by the Copyright Licensing Agency, 90 Tottenham Court Road, London W1P 9HE, UK, without the permission in writing of the Publisher.

Designations used by companies to distinguish their products are often claimed as trademarks. In all instances where John Wiley & Sons is aware of a claim, the product names appear in initial capital or all capital letters. Readers, however, should contact the appropriate companies for more complete information regarding trademarks and registration.

*British Library Cataloguing in Publication Data*

A catalogue record for this book is available from the British Library

ISBN 0 471# 97516 8; 0 471 97517 6 (pbk)

Rembrandt Wireless  
Ex. 2021

Apple Inc. v. Rembrandt Wireless Technologies, LP, IPR2020-00033

Page 2 of 9

## ACF/NCP

**ACF/NCP** In IBM's VTAM, Advanced Communications Function for the Network Control Program.

**ACF/SSP** In IBM's VTAM, Advanced Communications Function for the System Support Programs. Synonym for SSP.

**ACF/TAP** In IBM's VTAM, Advanced Communications Function for the Trace Analysis Program. Synonym for TAP.

**ACF/TCAM** In IBM's VTAM, Advanced Communications Function for the Telecommunications Access Method.

**ACF/VTAM** In IBM's VTAM, Advanced Communications Function for the Virtual Telecommunications Access Method.

**ACF/VTAM application program** In IBM's VTAM, a program that has opened an ACB to identify itself to ACFNTAM and can now issue ACFNTAM macro instructions.

**ACF/VTAM definition** In IBM's VTAM, the process of defining the user application network to ACFNTAM and modifying IBM-defined characteristics to suit the needs of the user.

**ACF/VTAM definition library** In IBM's VTAM, the operating system files or data sets that contain the definition statements and start options filed during ACFNTAM definition.

**ACF/VTAM operator** A person or program authorized to issue ACF/VTAM operator commands.

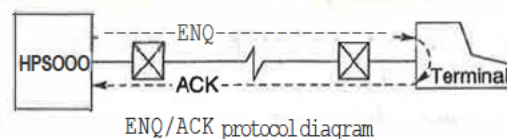
**ACF/VTAM operator command** A command used to monitor or control an ACFNTAM domain.

**ACF/VTAME** In IBM's VTAM, Advanced Communications Function for the Virtual Telecommunications Access Method Entry.

**ACI** Access Control Information.

**acknowledgment (ACK)** A control character used (with NAK) in BSC communications protocol to indicate that the previous transmission

block was correctly received and that the receiver is ready to accept the next block. Also used as a ready reply in other communications protocols, such as Hewlett-Packard's ENQ/ACK protocol (see following diagram) and the ETX/ACK method of flow control.



**ACM** Association for Computing Machinery.

**ACOC** Area Communications Operations Center.

**ACOnet** Akademisches Computer NETz, a research network in Austria.

**ACONSOLE** The name of a Novell NetWare 3.x utility program that allows a network supervisor to access a server via a modem connection and manage that server as if the user was at the server's console.

**Acorn** A trademark of AT&T for a network control system.

**acoustic coupler** A device that converts electrical signals into audio signals, enabling data to be transmitted over the public telephone network via a conventional telephone handset; it also converts the audio signals back into electrical signals at the receiving end. A kind of modem.

**ACP** Advanced Communications Package.

**ACP** Allied Communication Publication.

**acquire** 1. In IBM's VTAM, the operation in which an authorized ACFNTAM application program initiates and establishes a session with another logical unit; the application program acts as the primary end of the session. *Note.* The acquire process causes an Initiate request to be sent to the SSCP which causes the SSCP to return a CINIT request to the application program (the PLU); this in turn causes the PLU to send a BIND request to the SLU. Contrast with **Release**.

**Rembrandt Wireless**

Ex. 2021

Apple Inc. v. Rembrandt Wireless Technologies, LP, IPR2020-00033

Page 3 of 9



## marker

condition. 2. In data communications, a mark represents a binary 1; the steady-state, no-traffic state for asynchronous transmission. 3. The idle condition. 4. In the context of the virtual terminal, a mark is a signal inserted into an output data stream by the virtual terminal, to acknowledge that an attention or interrupt input signal has been received.

**marker** The common control device for a cross-bar switch.

**marker tape** A tape laid parallel to a conductor under the jacket in a cable. The tape is printed with the name of the manufacturer and specifications about the cable.

**mark-hold** The normal no-traffic line condition whereby a steady mark is transmitted.

**Markov constraint** A constraint on the routing method according to which the future route of a packet is independent of its past history, such as its source or its route so far. This constraint is implied by directory routing.

**mark-to-space transition** The transition, or switching from a marking impulse to a spacing impulse.

**MarkVision** The name of a software product built into some IBM laser printers which enables remote NetWare users to configure and monitor the status of the printer.

**MARS** Military Affiliate Radio System.

**Marquis** The name of a PC Card from Motorola of Schaumburg, IL that provides 28.8 kbps of data and fax communications, and functions as a 10Mbps Ethernet adaptor.

**MASER (Microwave Amplification by Simulated Emission of Radiation)** A device that generates signals in the microwave range, with low-noise characteristics.

**mask** Pattern of bits (1s or 0s) specified by the user that can be used with the trap mode of a communications test set.

**masking** A method of transforming one set of data into another while blocking or excluding some data from this process on the basis of code patterns or position.

**master antenna system** A coaxial cable distribution system which provides television to apartments, hotel rooms, hospitals and schools.

**master boot infector** A virus that overwrites or replaces the master boot record of a physical drive.

**master clock** The source of timing signals, or the signals themselves, which all network stations use for synchronization.

**master cryptography key** In IBM's SNA, a cryptographic key used to encipher operational keys that will be used at a node.

**master group** In Frequency Division Multiplexing (FDM), an assembly of 10 supergroups occupying adjacent bands in the transmission spectrum for purposes of simultaneous modulation and demodulation.

**master modem** In a multipoint system, the modem that transmits constantly in the outbound direction. Usually the modem at the central site. In a multitier system, the term represents a remote master, or a master modem that is not located at the central site.

**master station** 1. In multipoint circuits, the unit which controls/polls the nodes. 2. In point-to-point circuits, the unit which controls the slave station. 3. In LAN technology, the unit on a token-passing ring that allows recovery from error conditions, such as lost, busy, or duplicated tokens; a monitor station.

**MATE** An asynchronous communications software program from Concept Automation that operates on Data General MV computers.

**mathematical model** A mathematical description or approximation of some real event.

**matrix** In switch technology, that portion of the switch architecture where any input leads and any output leads meet.

Rembrandt Wireless

Ex. 2021

Apple Inc. v. Rembrandt Wireless Technologies, LP, IPR2020-00033

Page 4 of 9

## PC router

**PC Router** A program that is a part of the IBM PC 3270 Emulation Program or IBM 3270 PC Control Program that uses the Server-Requester Programming Interface (SRPI), to route requests from the PC requester programs to the corresponding router on the host.

**pcANYWHERE** A trademark of OMA, Inc., of New York, NY, as well as a PC-based remote computing software program marketed by that vendor.

**PCBoard** A series of bulletin board software marketed by Clark Development Co., Inc., of Salt Lake City, UT.

**PCI** Peripheral Component Interconnect.

**PCI** Protocol Control Information.

**PCL** Printer Control Language.

**PCM** 1. Plug Compatible Machine. 2. Pulse Code Modulation.

**PCMCIA** Personal Computer Memory Card International Association.

**PCNET** A local area network (LAN) developed by Orchid Technology based on coaxial cable running at 1 Mbps transmission rate.

**PC-NFS** A trademark of Sun Microsystems, Inc., as well as a networking product from that vendor which enables IBM PC and compatible computers to access a variety of small and large computer systems to include DEC VAX and IBM SNA networks.

**PCS** 1. Plastic Clad Silica. 2. Personal Communications Service.

**PC-SYNC** An internal synchronous modem and communications software marketed by Barr Systems, Inc., of Gainesville, FL, for the IBM PC series and PS/2 Models 25 and 30.

**PC-SYNC/2** An internal synchronous modem and communications software marketed by Barr Systems, Inc., of Gainesville, FL, for IBM PS/2 micro-channel personal computers.

**PC-Term** An asynchronous communications terminal emulation program from Crystal Point of Kirkland, WA, that operates on IBM PC and compatible personal computers.

**PCU** Packet Control Unit.

**pcX** The name of a software program from Tropical Communications Associates, Inc., of Debris Beach, FL, that performs packet assembler/disassembler functions. pcX operates on IBM PC and compatible personal computers.

**PD** Pulse Duration.

**PDF** Portable Document Format.

**PDI** Picture Description Instruction.

**PDM** Pulse Duration Modulation.

**PDN** 1. Packet Data Network. 2. Public Data Network.

**PDS** 1. Premises Distribution System. 2. Processor-Direct Slot.

**PDU** Protocol Data Unit.

**PDU lifetime** A value that indicates the number of router hops a Protocol Data Unit (POU) can flow across before it must either reach its destination or be discarded.

**Peak Cell Rate (PCR)** In an ATM network, the maximum rate at which cells can be transmitted across a virtual circuit.

**peak limiter** A filter used to reduce the effect of noise on a signal by clipping off noise peaks above the desired peak level of a signal; can be used on frequency modulated (FM), frequency shift keyed (FSK), or pulse-code modulated (PCM) signals.

**peak load** The maximum load, such as bits per second or packets per second, that can be placed on a network.

**peak to average ratio test (PAR)** The PAR test is a signal fidelity measurement designed to be sensitive to envelope delay distortion, attenuation distortion, and less sensitive to the

Rembrandt Wireless

Ex. 2021

400  
Apple Inc. v. Rembrandt Wireless Technologies, LP, IPR2020-00033

Page 5 of 9

# 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.