Exhibit 1410

McGRAW-HILL ELECTRONICS DICTIONARY

SIXTH EDITION

NEIL SCLATER
JOHN MARKUS

McGraw-Hill

New York San Francisco Washington, D.C. Auckland Bogotá
Caracas Lisbon London Madrid Mexico City Milan
Montreal New Delhi San Juan Singapore
Sydney Tokyo Toronto

Library of Congress Cataloging-in-Publication Data

Sclater, Neil

McGraw-Hill electronics dictionary / Neil Sclater, John Markus. — 6th ed.

n cm

Markus' name appears first on the earlier edition.

Includes index.

ISBN 0-07-057837-0

1. Electronics—Dictionaries. I. Markus, John, 1911-

II. Title.

TK7804.M354 1997

621.38'03-dc21

97-16168

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234567890 DOC/DOC 90210987

ISBN 0-07-057837-0

The sponsoring editor for this book was Steve Chapman, the editing supervisor was M. R. Carey, and the production supervisor was Clare Stanley. It was set in Times Roman by North Market Street Graphics.

Printed and bound by R. R. Donnelley & Sons Company.

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to contact between nt physical states, or l compositions. Also nd Volta effect. 2 ontrol grid and cathno external grid bias, ons of the electrode contact-potential barrier The potential hill at the contact surfaces of two bodies, due to formation of a barrier layer.

contact-potential difference The difference between the work functions of two materials in contact, divided by the electronic charge.

contact pressure The amount of pressure that holds a set of contacts together.

contact rectifier Metallic rectifier.

contact resistance The resistance in ohms between the contacts of a relay, switch, or other device when the contacts are touching each other. The value is generally a small fraction of an ohm.

contact wipe The distance that two mating contact surfaces slide with respect to each other while making or breaking contact.

contention A method of operating a multiterminal communication channel such as a local area network (LAN) in which any station can transmit if the channel is free. If the channel is in use, the queue of contention requests are maintained by a computer in chronological or other predetermined sequence.

continuity The presence of a complete path for current flow.

continuity test An electrical test that determines the pressence and location of an open connection.

continuous carrier A carrier over which information is transmitted without interrupting the carrier.

continuous control Automatic control in which the controlled quantity is measured continuously and corrections are a continuous function of the deviation.

continuous-duty rating The rating that defines the load which can be carried for an indefinite time without exceeding a specified temperature rise.

continuous linear antenna array An antenna array that consists of an infinite number of infinitesimally spaced sources, as in some dielectric antennas.

continuous loading Loading in which the added inductance is distributed uniformly along a line by wrapping magnetic material around each conductor.

continuously variable slope delta [CVSD] modulation A technique for converting an analog signal (such as audio or video) into a serial bit stream. Modulator/demodulator circuits that encode and decode functions on the same chip with a digital input for selection.

continuous power The power-handling rating of an audio or other amplifier, expressed in watts RMS for a sinewave signal.

continuous power spectrum A power spectrum that can be represented by the indefinite integral of a suitable spectral density function. All power spectra of physical systems are continuous.

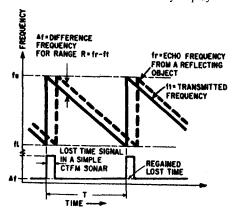
continuous recorder A recorder whose record sheet is a continuous strip or web rather than individual sheets.

continuous spectrum The spectrum of a wave whose components are continuously distributed over a frequency region without being broken up into lines or bands.

continuous-tone squelch Squelch in which a continuous subaudible tone, generally below 200 Hz, is transmitted by EM equipment along with a desired voice signal. The tone activates a frequency-sensitive circuit that unblocks the squelch circuit of the receiver to allow reception of the

desired message. Signals without the correct tone frequency or with no tone are not heard.

continuous-transmission frequency-modulated sonar [CTFM sonar] A sonar system whose transmitted frequency is varied continuously in linear sawtooth fashion. The frequency received by reflection from an object is then proportional to the range to that object. The difference between the transmitted and received frequencies is measured with a multichannel frequency analyzer and the results are fed to a PPI cathode-ray display.



Continuous-transmission frequency-modulated sonar principles.

continuous wave [CW] A radio or radar wave that maintains a constant amplitude and a constant frequency.

continuous-wave Doppler radar Continuous-wave radar. continuous-wave gas laser A laser that has a quartz envelope filled with a mixture of helium and neon at a low pressure, Brewster-angle mirrors at opposite ends, and an external optical system. An applied RF field excites the atoms in the tube, causing spontaneous emission of photons. These photons are reflected back into the gas to stimulate neon atoms, with the process repeating and building up to a self-sustained oscillation that becomes the desired coherent laser radiation. The useful portion of this radiation passes through the 1% transmissive mirrors in an extremely narrow beam. See also gas laser.

continuous-wave jamming The transmission of constantamplitude, constant-frequency unmodulated jamming signals as a radar countermeasure to change the gain characteristics of enemy radar receivers.

continuous-wave laser [CW laser] A laser that generates a beam of coherent light continuously, as required for communication and other applications. The maximum average power is generally less than can be obtained with pulsed operation.

continuous-wave radar [CW radar] A radar system whose transmitter sends out a continuous flow of radio energy. The target reradiates a small fraction of this energy to a separate receiving antenna located and oriented to minimize the amount of transmitted power that can enter the receiver. The reflected wave is distinguished from the transmitted signal by a slight change in radio frequency called the *Doppler shift*. Continuous-wave radar can distinguish moving targets against a stationary reflecting