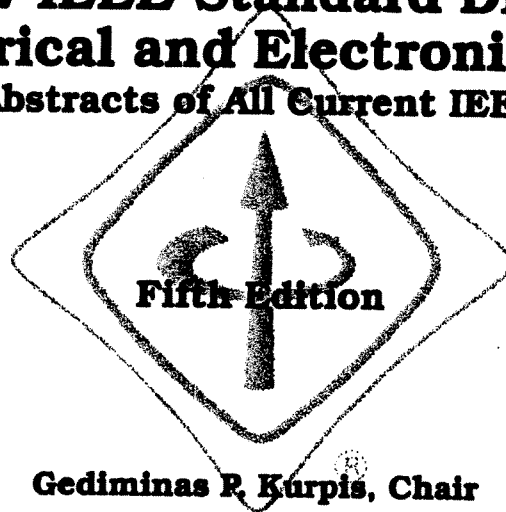


EXHIBIT 7

IEEE Std 100-1992

**The New IEEE Standard Dictionary
of Electrical and Electronics Terms**
[Including Abstracts of All Current IEEE Standards]



Gediminas P. Kurpis, Chair

Christopher J. Baugh, Editor

IEEE

transactor (power switchgear). A magnetic device with an air-gapped core having an input winding which is energized with an alternating current and having an output winding which produces a voltage that is a function of the input current. *Note:* The term "transactor" is a contraction of the words "transformer" and "reactor." C37.100-1981

transadmittance. For harmonically varying quantities at a given frequency, the ratio of the complex amplitude of the current at one pair of terminals of a network to the complex amplitude of the voltage across a different pair of terminals. *See:* interelectrode transadmittance (*J-I* interelectrode transadmittance of an *n*-electrode electron tube). [40]

transadmittance compression ratio (electron tubes). The ratio of the magnitude of the small-signal forward transadmittance of the tube to the magnitude of the forward transadmittance at a given input signal level. 161-1971w

transadmittance, forward (electron tubes). The complex quotient of (A) the fundamental component of the short-circuit current induced in the second of any two gaps and (B) the fundamental component of the voltage across the first. 161-1971w

transceiver (1) (data transmission). The combination of radio transmitting and receiving equipment in a common housing, usually for portable or mobile use, and employing common circuit components for both transmitting and receiving. 599-1966w

(2) (navigation aid terms). A combination transmitter and receiver in a single housing with some components being used by both parts. *See:* transponder. 172-1983

transconductance. The real part of the transadmittance. *Note:* Transconductance is, at most commonly used, the interelectrode transconductance between the control grid and the plate. At low frequencies, transconductance is the slope of the control-grid-to-plate transfer characteristic. *See:* electron-tube admittances; interelectrode transconductance. 161-1971w

transconductance meter (mutual-conductance meter). An instrument for indicating the transconductance of a grid-controlled electron tube. *See:* instrument. [119]

transcribe (electronic computation). To convert data recorded in a given medium to the medium used by a digital computing machine or vice versa. 162-1963

transcriber (electronic computation). Equipment associated with a computing machine for the purpose of transferring input (or output) data from a record of information in a given language to the medium and the language used by a digital computing machine (or from a

computing machine to a record of information). 270-1966w

transducer (1) (electrical heating applications to melting furnaces and forehearth in the glass industry). A device that is actuated by power from one system and supplies power in any other form to a second system. 668-1987
(2) (communication and power transmission). A device by means of which energy can flow from one or more transmission systems or media to one or more other transmission systems or media. *Note:* The energy transmitted by these systems or media may be of any form (for example, it may be electric, mechanical, or acoustical), and it may be of the same form or different forms in the various input and output systems or media. 145-1983, [2], [85]

(3) (metering). A device to receive energy from one system and supply energy (of either the same or of a difference kind) to another system, in such a manner that the desired characteristics of the energy input appear at the output. C12.1-1988

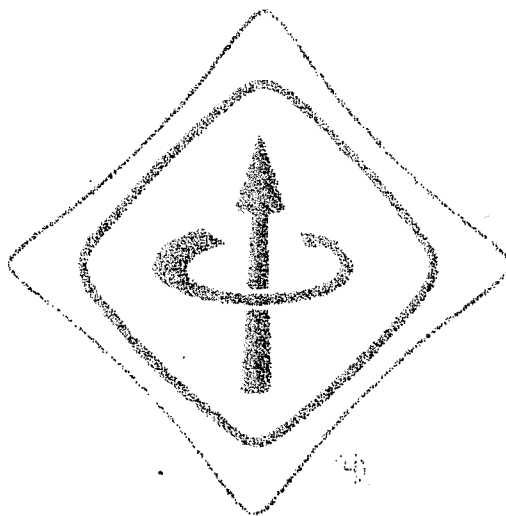
(4) (thyristor). A device which under the influence of a change in energy level of one form or in one system, produces a specified change in energy level of another form or in another system. 428-1981

transducer, active. A transducer whose output waves are dependent upon sources of power, apart from that supplied by any of the actuating waves, which power is controlled by one or more of the waves. *Note:* The definition of active transducer is a restriction of the more general active network: that is, one in which there is an impressed driving force. *See:* transducer. 270-1966w

transducer gain (1) (general). The ratio of the power that the transducer delivers to the specified load under specified operating conditions to the available power of the specified source. *Notes:* (A) If the input and/or output power consist of more than one component, such as multifrequency signals or noise, then the particular components used and their weighting must be specified. (B) This gain is usually expressed in decibels. *See:* transducer. 270-1966w

(2) (two-port linear transducer). At a specified frequency, the ratio of (A) the actual signal power transferred from the output port of the transducer to its load, to (B) the available signal power from the source driving the transducer. 161-1971w

transducer, ideal (for connecting a specified source to a specified load). A hypothetical passive transducer that transfers the maximum available power from the source to the load. *Note:* In linear transducers having only one input and one output, and for which the impedance concept applies, this is equivalent to a transducer that (A) dissipates no energy and (B) when connected to the



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