

**EXHIBIT 26**

# Chambers Science and Technology Dictionary

General Editor:  
Professor PETER M. B. WALKER, CBE, FRSE

CHAMBERS  
CAMBRIDGE

GOG 032270

CAMBRIDGE EDINBURGH  
NEW YORK NEW ROCHELLE MELBOURNE SYDNEY

Published jointly by W & R Chambers Limited  
43-45 Annandale Street, Edinburgh EH7 4AZ, and  
The Press of the Syndicate of the University of Cambridge  
The Pitt Building, Trumpington Street, Cambridge CB2 1RP  
32 East 57th Street, New York, N.Y. 10022, USA  
10 Stamford Road, Oakleigh, Melbourne 3166, Australia

© W & R Chambers Ltd and Cambridge University Press 1988  
First published (as *Chambers's Technical Dictionary*) 1940

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 or otherwise, without the prior permission of the copyright holders.

**British Library Cataloguing in Publication Data**

Chambers science and technology dictionary.—New ed.

1. Science. Encyclopaedias—Bibliographies
  2. Technology. Encyclopaedias
1. Walker, Peter H. Dictionary of science and technology  
503'.21

ISBN 1-85296-150-3  
ISBN 0-85296-151-1 Pbk

Typeset by H. Charlesworth Ltd, Huddersfield

Printed by Richard Clay Ltd, Bungay, Suffolk

## Contents

Preface
Subject categories
Contributors
Abbreviations used in
Greek alphabet
<b>The Dictionary</b>
<b>Appendices</b>
Paper Tables
Chemical Formulae
Chemical Elements
Periodic Table
Animal Kingdom
Plant Kingdom
Geological Table
Physical Concepts in SI
SI Conversion Factors
Physical Constants, Sta

GOG 032271

## dasypaedes

piston attached to the part to be controlled (fitted with a nonreturn valve if required) sliding in a cylinder containing liquid to impede motion.

**dasypaedes** (*Zool.*). Birds which when hatched have a complete covering of down. Cf. *altrices*.

**data** (*Comp.*). All the operands and results of computer operations directed by the detailed instructions comprising the program. A program can be *data* for another program, e.g., a compiler takes a program as *data*.

**data bank** (*Comp.*). Collection of databases or large files of data.

**data base** (*Comp.*). Collection of structured data independent of any particular application.

**database management system** (*Comp.*). Software that handles the storage, retrieval and updating of data in a computer, often integrating data from a number of files. Also *DBMS*. See *data model*.

**database typesetting** (*Print.*). The storing of information in a database for publications such as directories which can be periodically updated by computer processing and prepared for phototypesetting.

**data capture** (*Comp.*). Collecting data for use in a particular computer process, e.g., for monitoring.

**data compaction** (*Comp.*). Term often applied to *data compression* that involves only the removal of extraneous and unnecessary space and therefore is not reversible.

**data compression** (*Comp.*). Altering the form of data to reduce its storage space.

**data dictionary** (*Comp.*). Index of the contents of a set of files or a database. See *directory*.

**Data Encryption Standard** (*Comp.*). An automatic method of data encryption designed by IBM and adopted as a standard.

**data flow** (*Comp.*). An approach to the organization of complex algorithms and machines, in which operations are triggered by the arrival of data.

**data flowchart** (*Comp.*). Flowchart used to describe a complete processing system, clerical operations and individual programs, but excluding details of such programs. Also *system flowchart*.

**data handling** (*Space*). The management and flow of data to-and-from a space vehicle; the on-board subsystem might include data buses, commutators, computers, recorders, multiplexers, etc. whereas the ground segment uses equipment like de-multiplexers and display units to interpret the transmitted signal which is sent either directly or via a data relay satellite.

**data-handling capacity, capability** (*Telecomm.*). The maximum amount of information which can be transmitted and received over a given channel or circuit.

**data-handling system** (*Comp.*). Term, no longer widely used, for automatic or semi-automatic equipment for collecting, receiving, transmitting, and storing numerical data. It may be handled continuously (as analogue or position signals) or in discrete steps (as digital or binary signals). The system may also be able to perform calculations on the stored data.

**data model** (*Comp.*). A structure for the arrangement of data which aids data retrieval. There are three models in general use, a *hierarchical model*, a *network model* and one giving a *relational data base*.

**data preparation** (*Comp.*). Translation of data into machine readable form.

**data processing** (*Comp.*). Traditional name given to business information processing. Abbrev. *DP*.

**data protection** (*Comp.*). Safeguards to protect the integrity, privacy and security of data.

**data reduction** (*Comp.*). The computerized repackaging of observational data to make it more concise and meaningful.

**data retrieval** (*Comp.*). The search for and selection of data from a store.

**data signalling rate** (*Telecomm.*). The aggregate rate at which binary digits, including any control bits, are transmitted over a channel or circuit, expressed in bits/second. Cf. *baud*.

**data storage** (*Comp.*). See *memory capacity*.

**data structure** (*Comp.*). Organized form in which grouped

228

## d.c. amplifier

data items are held in the computer, such as *list*, *tree*, *table*, *string*.

**data type** (*Comp.*). Most programming languages require a variable to be declared as a *data type*. Basic restrictions and assumptions will then control the use of the variable. See *character*, *tree*, *stack*, *queue*, *set*, *real*, *integer*, *Boolean*, *string*, *list*.

**Datel** (*Comp.*). TN for data transmission facilities provided by British Telecom.

**dativite bond** (*Chem.*). See *covalent bond*.

**datolite** (*Min.*). Hydrated calcium borosilicate occurring as a secondary product in amygdaloids and veins, usually as distinct prismatic white or colourless monoclinic crystals.

**datum** (*Aero.*). *Datum level*, or *rigging datum*, is the horizontal plane of reference, in flying attitude, from which all vertical measurements of an aircraft are taken; *cg datum* is the point from which all mass moment arms are measured horizontally when establishing the centre of gravity and loading of an aircraft.

**datum** (*Eng.*). A point, line or surface to which dimensions are referred on engineering drawings and from which measurements are taken in machining or other engineering operations.

**datum** (*Surv.*). An assumed surface used as a reference surface for the measurement of reduced levels.

**daubing** (*Build.*). (1) The operation of dressing a stone surface with a special hammer in order to cover it with small holes. (2) A rough-stone finish given to a wall by throwing a rough coating of plaster upon it. See *rough-cast*.

**daughter** (*Biol.*). Offspring belonging to the first generation, whether male or female; as *daughter cell*, *daughter nucleus*.

**daughter product** (*Phys.*). A nuclide that originates from the radioactive disintegration of another *parent* nuclide.

**Davis apparatus** (*Ships*). A respiratory apparatus specially designed to permit escape from a pressure-equalizing chamber in a submarine. Oxygen is breathed from a chamber which, embracing the wearer, gives buoyancy and assists rise to the surface.

**Davison-Germer experiment** (*Electronics*). The first demonstration (1927) of wavelike diffraction patterns from electrons by passing them through a nickel crystal.

**Davy lamp** (*Min.Extr.*). The name of the safety lamp invented by Sir Humphrey Davy in 1815.

**day** (*Astron.*). See *apparent solar*, *mean solar*, *sidereal*.

**daylight** (*Eng.*). The distance between the bed surface and the bottom of the ram of a press.

**daylight factor** (*Elec.Eng.*). The ratio of the illumination measured on a horizontal surface inside a building to that which obtains at the same time outside the building, due to an unobstructed hemisphere of sky. Occasionally called *window efficiency ratio*.

**daylight lamp** (*Phys.*). A lamp giving light having a spectral distribution curve similar to that of ordinary daylight.

**day-light size** (*Build.*). The distance between successive mullions in a window and between lintel and sill.

**day-neutral plant** (*Bot.*). A plant in which flowering is not sensitive to day-length. Cf. *long-day plant*, *short-day plant*. See also *photoperiodism*.

**dB** (*Acous.,Telecomm.*). Abbrev. for *decibel*.

**dBA, dBB, dBC** (*Acous.*). Result of a sound pressure level measurement when the signal has been weighted with a frequency response of the A, B, or C curve. The dBA curve approximates the human ear and is therefore used most in noise control regulations.

**dBm** (*Telecomm.*). A unit for expressing power level in decibels, relative to a reference level of one milliwatt.

**DBMS** (*Comp.*). See *database management system*.

**DBS** (*Image Tech.*). *Direct Broadcasting by Satellite*.

**DBS** (*Telecomm.*). Abbrev. for *Direct Broadcast Satellite*.

**d.c.** (*Elec.Eng.*). Abbrev. for *direct current*.

**d.c.** (*Print.*). Abbrev. for *double column*, *double crown*.

**d.c. amplifier** (*Elec.Eng.*). One which uses direct coupling between stages (i.e. no blocking capacitor) to amplify from zero frequency (d.c.) signals to signals of higher frequency.

## d.c. balancer

**d.c. balancer** (*Elec.Eng.*). Two or more similar conductors connected machines are maintained

**d.c. bias** (*Elec.Eng.*). Direct signal applied the quiescent condition

a.c. signal may be recorder, the addition signal recording to st

**d.c. bridge** (*Elec.Eng.*). by a d.c. supply. The other examples the m

**d.c. component** (*Imag.*) signal which determines of the reproduced pi

**d.c. converter** (*Elec.*) direct current from c

**d.c. coupling** (*Electro*) **d.c./d.c. converter** (1

mer using an inverter **transformer**.

**DCF** (*Build.*). Abbrev. **d.c. generator** (*Elec.*) mechanical into dire

**d.c. meter** (*Elec.Eng.*) component of a sign

**d.c. resistance** (*Elec.*) offers to the flow o

(ohmic) resistance. **d.c. restoration** (*Ima*

very low frequency reduced in transmis

clamp to hold the le **d.c. testing of cable:**

d.c. voltage of 5 ti voltage. Cables which likely to break dow

d.c.; healthy cables **d.c. transformer** (*El*

direct currents by m Colloq. for *d.c./d.c.*

**d.c. transmission** ( together different p and receiving bulk not attractive. Loss effectively, steady s ant if cables are us

power systems do vantage is cost of and receiving ends. **d.c. transmission** (1

low frequency in it it has to be restor receiver.

**DDL** (*Comp.*). **Dat DBMS**.

**DDT** (*Chem.*). Abb in which *pp'*-dichl nates; a synthetic it to insects at low

insecticide and ce persistence of active caused it to be bai

**deactivation** (*Chem*) molecule, or subst (2)

**dead** (*Acous.*). A reverberation muc audition requirem

production. **dead** (*Build.*). **Said** (*Eng.*). engine during wh stop-valve is open slide-valve. **dead axle** (*Eng.*) wheels carried by

GOG 032272