

EXHIBIT 3

DICTIONARY OF COMPUTER WORDS

Revised Edition



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cache [kash] 1. An area of storage devoted to the high-speed retrieval of frequently used or requested data. Data can be retrieved much more quickly from a cache than it can from another storage area, such as a disk or RAM. A cache typically mimics a larger, slower area of storage. 2. A part of RAM set aside to facilitate access to the data that is needed most often. The cache uses faster, more expensive *static RAM chips*. Every time a request for data is sent to RAM, the cache intercepts the request. If the data is already in the cache, it can be sent immediately. Otherwise, the cache accesses the data from the slower chips in RAM and sends it to the *micro-processor*, but also keeps a copy in case it is needed again soon. When no requests are made, the cache copies and stores data from RAM *addresses* near the data most recently needed on the theory that they may be needed next. When the cache is full, it erases the data that has waited the longest without being needed. Also called *RAM cache*.

CAD [kad] Acronym for **computer-aided design**. The use of computer programs and systems to design detailed two- or three-dimensional models of physical objects, such as mechanical parts, buildings, and molecules. Many CAD systems allow the user to view models from any angle, to move about inside of the model, and to change its scale. When the designer or engineer changes one part of a model, the CAD system is able to reconfigure the rest of the model around this new specification. CAD systems require fast microprocessors and high-resolution video displays. Until the last few years, all CAD systems were *dedicated minicomputers*. CAD software that runs on general-purpose *workstations* and powerful *personal computers* is now available. See also *CASE*.

CAD/CAM [KAD-kam] Acronym for **computer-aided design/ computer-aided manufacturing**. A computer system that designs and manufactures products. An object is designed with the CAD component of the system, and the design is then translated into manufacturing or assembly instructions for specialized machinery. See also *CAD*, *CAM*.