## Exhibit 24

# to Motorola's Opening Claim Construction Brief

July 28, 2011

## DICTIONARY OF DATA COMMUNICATIONS

**Second Edition** 

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### A HALSTED PRESS BOOK

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#### 4 active file

**active file:** A file which is being used in which entries or references are made on a current basis.

active intruder: An intruder who can record messages to hear later, send his own messages on the desired communication channel, or alter legitimate messages before they reach the intended receiver.

active master file: A specific master file that contains items relatively active or frequently used as contrasted to static or reference items.

active master item: The most active items on a master file by usage data.

active network: A electronic network which contains any sources of power other than signal inputs.

active state: The state of an interrupt level that is the result of the central processor starting to process an interrupt condition.

active transducer: Any transducer in which the applied power controls or modulates locally supplied power, which becomes the transmitted signal, as in a modulator, radio transmitter.

**activity level:** The value taken by a structural variable in an intermediate or final solution to a programming problem.

actuating signal: A particular input pulse in the control circuitry of computers.

ADAPSO: An association of U.S. and Canadian data processing service organizations.

add-on: Hardware attached to a computer to increase performance or memory.

add/subtract time: The time required to perform an addition or subtraction, exclusive of the time required to obtain the quantities from storage and put the sum or difference back into storage. adaptive tree walk protocol: A limited contention protocol with stations organized in a binary tree.

add time (in microseconds): The time required to acquire from memory and execute one fixed-point add instruction using all features such as overlapped memory banks, instruction look-ahead and parallel execution.

add-to-storage concept: The process in which the sum of two numbers is calculated by adding the first number to the second and the results replace the second number (all in one operation).

adder-subtracter: (ISO) A device that acts as an adder or subtracter depending upon the control signal received. The adder-subtracter may be constructed so as to yield the sum and the difference at the same time.

addition without carry: A logical operation applied to two operands that produce a result relying on the bit patterns of the operands and according to rules for each bit position.

additional character: A character which is neither a letter nor a number, but which is usually a punctuation mark, %, —, #; i.e., a member of a specialized alphabet. A specific meaning is assigned to this character to use it to convey special information.

additional label processing: The use of the input/output label system to verify or create a standard label and then, by user's routines, verify or insert additional information in the optional field of the standard label.

address: 1. A character or group of characters that identifies a register, a particular part of storage, or some other data source or destination. 2. To refer to a device or an item of data by its address.

address, control data, and checksum fields: Four kinds of fields in bit oriented protocol frames.

address comparator: A device used to verify that the correct address is being read. The comparison is made between the address being read and the specified address.

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address conversion: The translation of the relative or symbolic addresses into absolute addresses by use of  $a^{\circ}$  computer, or manually.

address field: The portion of an instruction word that contains the operand address.

address format: 1. The arrangement of the address parts of an instruction. The expression "plus-one" is frequently used to indicate that one of the addresses specifies the location of the next instruction to be executed. Such as one-plus-one, two-plusone, threeplus-one, four-plus-one. 2. The arrangement of the parts of a single address such as those required for identifying channel, module, track, etc. in a disk system.

address generation: A number or symbol generated by instructions in a program and used as an address part, i.e., a generated address.

address immediate instruction: Specific instructions designed to contain the value of the operand in its address part rather than the address of the operand. It is used most often for incrementing a count by a fixed amount or masking a partial-word field of data, or for testing a special character for identical characteristics with the immediate character in the instruction.

address register: A register in a computer where an address is stored.

addressing level: A determination of the number of steps of indirect address which have been applied to a particular program. First level is direct addressing, i.e., the address part of the instruction word has the address of the operand in storage. In second level addressing (indirect), the address part of the instruction word gives the storage location where the address of the operand may be found.

adjacent channel: The channel whose frequency band is adjacent to that of the reference channel.

adjacent channel interference: The presence of undesirable energy in a channel caused by one or both sidebands of modulated carrier channels in close frequency proximity extending from one into another through electrostatic or electromagnetic coupling.

adjoint system: A method of computation based on the reciprocal relation between a system of ordinary linear differential equations and its adjoint.

administrative data processing: An expression usually meaning business data processing such as the recording, classifying, or summarizing of transactions, activities, events, etc. Usually of a financial nature, or the collection, retrieval, or control of such items.

admissible mark: Specific rules or conventions determine which marks, symbols, and numerals or characters are permitted in various areas of computing for all installations and for various languages.

advanced data communication control procedure (ADCCP): A version of synchronous data link control (SDLC) modified by the American National Standards Institute (ANSI).

Advanced Research Project Agency Network (ARPANET): The long-haul communications network maintained by an agency (ARPA) of the United States Federal Government. ARPANET is one of America's most important networks because it links not only government computers, but research computers at virtually every major American university as well.

AFIPS: An organization of computer related societies. Its members include: The Association for Computer Machinery; The

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