### UNITED STATES DISTRICT COURT DISTRICT OF MASSACHUSETTS EASTERN DIVISION

RED BEND LTD., and RED BEND SOFTWARE INC.,

Civil Action No. 09-cv-11813-DPW

DECLARATION OF STEPHEN A.

EDWARDS IN SUPPORT OF PLAINTIFFS' PROPOSED CLAIM CONSTRUCTION

Plaintiffs.

٧.

GOOGLE INC.,

Defendant.

I, Stephen A. Edwards, declare as follows:

### I. Introduction

- 1. I make this declaration in support of Red Bend Ltd.'s and Red Bend Software Inc.'s (collectively "Red Bend") proposed claim construction.
- 2. The statements made herein supplement my two prior declarations dated November 17, 2009 and March 24, 2010.

#### **II. Claim Construction**

- 3. Red Bend's Proposed Claim Constructions are set out in attached Exhibit A.
- 4. Red Bend's Proposed Claim Constructions have been modified from those offered at the preliminary injunction stage of this litigation. Some modifications were made in order to address the new contexts in which the terms appear in claims that were not asserted at the preliminary injunction stage. It is my understanding that Red Bend made some other modifications in an attempt to narrow the issues in dispute.

- 5. I agreed with Red Bend's proposed claim constructions at the preliminary injunction stage. Further, I agree with Red Bend's current proposed claim constructions and set forth my reasons below.<sup>1</sup>
- 6. Red Bend's proposed construction of "data table" is a combined restatement of the definitions of the terms "data table" and "entry" from the glossary of the '552 patent 2:33-36; 2:62-63. *See also* '552 patent 2:29-63; 3:5-7; 15:9-13.
- 7. Red Bend's proposed construction of "executable program" remains unchanged from the construction I provided in my Reply Declaration. *See* Docket No. 60, Reply Edwards Decl. ¶¶ 24-27.
- 8. Google has argued in the past that the prosecution history supports its proposed construction that "executable program" needs to "exclude source or other symbolic code." However, the portion of prosecution history that Google has relied on (RedBend151) actually uses the phrase "textual or other symbolic representation of the program," which to me means that the applicant was distinguishing techniques that operated on *complete* textual or symbolic representations of a program from his -- not that he was insisting that no textual or symbolic information may ever exist in an executable representation of a program. "Executable files" (which by definition contain executable programs) routinely contain *some* symbolic and textual information. *See* Docket No. 60, Reply Edwards Decl. ¶¶ 27, 30-33.
- 9. Red Bend's proposed construction of "invariant references" ("values made the same") is based on plain meaning (the term "invariant" means "the same") along with

<sup>&</sup>lt;sup>1</sup> Regarding the term "compact difference result," I stand by my earlier proposed construction, but understand that Red Bend has proposed an alternative construction for purposes of narrowing the parties' dispute.

descriptions from the specification.<sup>2</sup> See, e.g., '552 patent 10:10-15. See also '552 patent 10:57-60; Fig. 2. Google's additional language is, in part, superfluous of language already in the claims, and also attempts to improperly (1) import a preferred embodiment into the claims and (2) introduce limitations regarding the generation of the compact difference result, which is a separate term to be construed.

10. Red Bend's proposed constructions of the terms "modified old program," "modified new program," "modified old data table," and "modified new data table" are taken from the specification and figures of the '552 patent, the Reasons for Allowance of the '552 patent and U.S. Patent 5,832,520 to Miller (hereinafter "Miller") cited in the Reasons for Allowance. "Fig. 2 shows exemplary old and new programs and the various interim results that are obtained by applying the sequence of operations of Fig. 1." '552 Patent 9:16-18. Fig. 2 shows representations of structures denoted P1, P'1 (P-prime-1), P''1 (P-double prime-1), P2, P'2, and P''2. "Prime" is defined as "a symbol or accent ' suffixed in writing or printing to distinguish one character from a related character (as a' from a or from a'')." See Exh. B, Webster's Third New International Dictionary, Unabridged. Merriam-Webster, 2002 (available at http://unabridged.merriamwebster.com/cgi-bin/unabridged?va=prime&x=0&y=0 (last accessed July 13, 2010)) (emphasis supplied). Prime notation is understood by one of ordinary skill in the art to denote things that are "related to" each other. Thus P1, P'1, and P"1 are related to each other as are P2, P'2, and P''2. P1 and P2 represent the old and new programs/data tables while the primed versions of these elements represent modified old and modified new programs/data tables respectively. Fig. 2 thereby shows that the modified old

<sup>&</sup>lt;sup>2</sup> This proposed construction differs slightly from my earlier construction in that I now use the term "values" instead of "references" in part for the purposes of narrowing the parties' dispute.

program/data table is related to the old program/data table and the modified new program/data table are interim results related to the new program/data table.

- states that Miller's system "also scans the old program and creates a modified old program, col. 3 lines 1-10 and col. 6 lines 34-44." *See* RedBend166. The Examiner also explains in the Supplemental Notice of Allowance that Miller's Text String Index "suffices as the 'modified old program' (again see col. 6 lines 34-66)." *See* RedBend176. The cited portions of the Miller patent state "[t]he Text String Index (TSI) is a *data structure* that decreases the search time for text strings in the old file." *See* Miller 6:39-40 (emphasis supplied). The TSI is an index of the old file, not a version of the old file in its original executable form with certain portions replaced, yet the Examiner stated that it "suffices as the 'modified old program." *See* RedBend176. Therefore, the Examiner understood, and I agree, that modified old/new program/data table is properly construed as an interim result, such as tables or data structures, related to the old/new program/data table.
- 12. I changed my construction of "modified new data table" because the scope of the dispute has widened to now include client-side claims, which use the term in the broader sense I described above. I then changed my construction of "modified old data table" to make the construction of these similar terms consistent.

### **III. Additional Comments**

13. An executable program contains many references to its own instructions.

Often, many distinct addresses are referred to many times. For example, a subroutine called from many places in a program would be referred to many times in an executable.

14. Because any particular unique address may be referenced many times in a particular program, the total number of changed references removed from the difference result is the main determining factor in reducing its size, not the complete exclusion of any particular address that appears in a reference entry.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct and that this declaration was executed on July 15, 2010 at New York, New York.

By:

Stephen A. Edwards

# EXHIBIT A

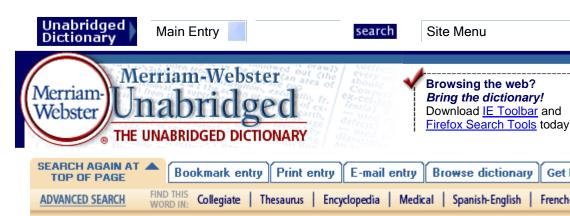
## Red Bend v. Google Proposed Claim Constructions - [July 15, 2010]

Claim Terms at Issue	Independent Claims	Red Bend Proposed Construction
data table	42, 46, 55, 59	A table of entries, where an entry is an addressable unit within the data table. Each entry may have a different size. An executable program is one example of a data table.
executable program	8, 12, 21, 25	A program comprising machine language instructions and corresponding bytes of data used by the program that are ready to be run on a computer.
invariant references	8, 12, 21, 25, 42, 46, 55, 59	Values made the same.
modified old data table	42, 46, 55, 59	An interim result, such as tables or data structures, related to the old data table.
modified old program	8, 12, 21, 25	An interim result, such as tables or data structures, related to the old executable program.
modified new data table	42, 46, 55, 59	An interim result, such as tables or data structures, related to the new data table.
modified new program	8, 12, 21, 25	An interim result, such as tables or data structures, related to the new executable program.

# EXHIBIT B

Get help

French-English



24 entries found.

prime[1,noun] prime[2,adjective] prime[3,adverb] prime[4,verb] prime[5,noun] prime[6,intransitive vert double prime prime cost prime factor prime matter prime meridian prime minister prime ministerial prime ministership prime ministry prime mover prime number prime tone prime vertical prime vertical dial

To select an entry, click on it. Click 'Go' if one entry is listed.



Double-click any word in the entry to see its definition.

Main Entry: <sup>1</sup>prime <u>Pronunciation Guide</u>

Pronunciation: prīm Function: noun Inflected Form(s): -s

Etymology: Middle English, from Old English  $pr\bar{1}m$ , from Latin prima (hora) first hour, from prima, feminine of primus first + hora hour -- more at  $\underline{HOUR}$ 

**1 a** often capitalized: a religious office constituting the first of the daytime canonical hours -- compare <u>LAUD</u>, <u>MATINS</u> **b**: the first hour of the day usually considered either as 6 a.m. or the hour of sunrise

**2 a :** the beginning or earliest stage of something : the first part or age <saurians of the *prime* -- Henry Adams> **b :** <u>SPRING</u> <the *prime* of the year> **c :** the spring of life : <u>YOUTH</u> <in her *prime*, pretty as a lamb, a laughing girl -- A.E.Coppard>

**3 a :** the most active, thriving, or successful stage of something <patent medicines were in their *prime* -- Thérèse S. Westermeier> <the *prime* of his musical career -- Terry de Valera> **b :** the period of greatest vigor and productivity in a person's life <these two home-run sluggers, who were tremendous crowd pullers in their *prime* -- *Collier's Year Book*>

**4 a :** the chief or best individual of a group < prime of the flock, and choicest of the stall -- Alexander Pope> **b :** the best part of something < give him always of the prime -- Jonathan Swift> **c :** an export grade of yellow pine lumber of very high quality that is free from defects and largely heartwood

d: sheet metal products of the highest commercial quality

5: PRIME NUMBER

**6 a : PRIMERO b :** the second-highest hand in <u>primero</u> and related games consisting of one card of each suit  $\mathbf{c}$ : a block in backgammon formed by a series of six closed points

**7:** a parry in fencing defending the upper inside target in which the hand is to the left at head height in a position of pronation with the point of the blade directed downward and the forearm is across the body parallel to the ground -- called also *first*; compare **QUARTE** 

**8 a :** the first note or tone of a musical scale : **TONIC b :** a tone represented by the same staff degree as a given tone **c :** the pitch relation between two such musical notes or tones or their simultaneous combination **d : PRIME TONE** 

 $\overline{\bf 9}$ : a symbol or accent 'suffixed in writing or printing to distinguish one character from a related character (as a' from a or from a''), to indicate a relative unit (as a minute of angle or a foot), or to differentiate a mathematical function -- compare  $\underline{\bf DOUBLE\ PRIME}$ 

#### Citation format for this entry:

"prime." Webster's Third New International Dictionary, Unabridged. Merriam-Webster, 2002. http://unabridged.merriam-webster.com ( 14 Jul. 2010).

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### **CERTIFICATE OF SERVICE**

I hereby certify that this document filed through the ECF system will be sent electronically to the registered participants as identified on the Notice of Electronic Filing (NEF) and paper copies will be sent to those indicated as non-registered participants on July 15, 2010.

By:	/s/ Jennifer C. Tempesta	
-	Iennifer C Tempesta	