Sun Microsystems, Inc.Vs Microsoft Corporation
A Case In Point
By Tarak G. Modi

The Facts

The announcement and widespread popularity of the JAVA Programming language resulted in an immediate appreciation of the threat posed by Sun's JAVA technology to the foundations of the Microsoft monopoly. So pronounced was the threat that in September 1996, Bill Gates warned his staff "This scares the hell out of me".

Microsoft had three legitimate choices:

- Ignore Sun's technology and hope that it would fail.
- Independently develop and distribute products that incorporated its own technology to compete against JAVA.
- License JAVA technology from Sun and become a distributor of products that incorporate JAVA technology.

Microsoft chose the third option.

On March 11th, 1996, Microsoft entered into two written agreements (the "contract") with Sun Microsystems. The two agreements included a Trademark license and a Technology License and Distribution Agreement (TLDA). These agreements granted Microsoft the right to make and distribute products incorporating Sun's JAVA Technology, and to mark such products with Sun's JAVA Compatible trademark.

Following are the highlights of the contract

- Microsoft promised to incorporate Sun's JAVA Technology in certain products, including Microsoft's Internet Explorer 4.0, in a manner that fully conformed with and adhered to Sun's

set of published specifications ("JAVA specifications") and "public" application programming interfaces ("JAVA APIs") for the JAVA Technology

- Microsoft promised to incorporate Sun's future upgrades to its JAVA specifications and JAVA APIs as and when released by Sun in order to maintain compatibility with Sun's set of JAVA specifications and JAVA APIs for a period of five years

- Microsoft expressly agreed to refrain from distributing any products incorporating Sun's JAVA Technology that did not pass the test suites provided by Sun to ensure that the products Microsoft distributed were in fact compatible with Sun's set of JAVA specifications and JAVA APIs for the JAVA Technology.

- Microsoft promised to mark each product it distributed that implemented Sun's JAVA Technology with Sun's "JAVA Compatible" logo, but only after each such product successfully passed Sun's test suites and otherwise met the compatibility requirements of the agreements.

On October 7th, 1997, Sun filed a lawsuit against defendant Microsoft Corporation in a United States District court for trademark infringement, false advertising, breach of contract, unfair competition, interference with prospective economic advantage, and inducing breach of contract.

Highlights of Microsoft's Response to the lawsuit are as follows

- The agreement reserved to Microsoft the sole discretion to determine (w.r.t anything other than IE 3.0) whether to distribute some of , derivatives of, or a substitute of the technology.

- Microsoft refused to agree to any restrictions that would allow Sun to dictate Microsoft's future development or distribution of the technology.

- Sun agreed to limit its remedies and in particular agreed that it (Sun) could not seek an injunction to interfere with Microsoft's business.

- Microsoft had performed all of its contractual obligations with good faith. However Sun had consistently failed to perform its side of the contract.

<u>The Issues Presented</u>

Issue 1: Extenstions to the JAVA lanaguage

One of the key issues in the case revolves around the three compiler directives

(@DLL,@COM,and @SECURITY) and the two additional keywords (DELEGATE and

MULTICAST) supported by Microsoft's version of the compiler. JAVA programs using these

feature will only run with Microsoft's version of the compiler and runtime interpreter. As pointed

out by Sun these extensions are not part of the JAVA language. Sun contends that nowhere in

the contract is Microsoft granted the right to extend the JAVA language. Microsoft however

contends that the contract covers the runtimes and the compiler - not the language itself. Section

2.6 (Compatibility) of the TLDA agreement is the clause of dispute in this issue.

Issue 2: JAVA Native Interface (JNI) Support

Microsoft's VM supports the Raw Native Interface (RNI) but does not support the JNI defined by

Sun. All other implementations of the JAVA VM support JNI. The question is, is Microsoft

contractually obligated to support JNI? Alan Baratz in testimony given under the direct testimony

of lead attorney Lloyd Day stepped though a series of definitions in the contract. Baratz stated

that the definition of the Applet Application Programming Interface (AAPI) in the contract has

been defined to include all interfaces for the VM, including native method interfaces defined by

Sun. Microsoft however contends that there is no such contractual obligation for JNI support, the

reason being that JNI did not exist at the time the contract was signed. Sun however says that the

Native Method Invocation (NMI) was a part of the original JVM specification and JNI is a

successor of NMI.

<u>Analysis of the Issues</u>

So which arguments prevail? At least both sides agree that they do have a contract. The contract between Sun and Microsoft explicitly states that Microsoft is required to pass compatibility tests for technology and for its upgrades. The AAPI in turn includes the OEM JAVA VM specification, and hence either the AAPI or the OEM specification includes JNI, it certainly appears that Microsoft would be obligated to include JNI. At various points in the proceedings Microsoft attorneys made the argument that by adding compiler switches and by providing RNI, Microsoft is merely offering developers more choices. This would probably be true if Microsoft had included support for JNI. However as the facts indicate, Microsoft is not providing more choices; it is substituting a standard option with its own version of the option i.e. JNI with RNI. In fact, this may be a situation where Microsoft using its huge market power is trying to impose its own version of JAVA. This seems to agree with Sun's allegations for contract breach, trademark infringement, and unfair competition by Microsoft.

As part of its defense Microsoft brought in an economist, Professor Jerry Hausman, to talk about the tremendous cost the company would occur if it would have to retrofit its version of the VM to support JNI. Does this mean that Microsoft thinks that it has breached their contract with Sun, and is trying to shirk out of the consequences of its actions? Was this an attempt by Microsoft to convince the court that it should be relieved from the contract due to "Impracticality of Performance"? If so, Microsoft attorneys are forgetting the fact that such would apply only if the circumstances created were beyond either side's control. Also, as part of his testimony, Professor Hausman claimed that cross-platform alternatives are not really as good as single-platform alternatives because they are slower. This statement was totally uncalled for. First of all, however intelligent and accomplished Professor Hausman may be, he is not a qualified expert in the field of cross-platform software development. Secondly, the case is not about whether cross-platform alternatives are faster than their single-platform counterparts. It is a given that JAVA was developed to solve the cross-platform issue irrespective of whether it was faster or slower. This is a case about a breach of contract.

In fact several statements made by the Microsoft attorneys and witnesses during the course of the proceedings seemed to reflect a basic misunderstanding of the issues. Microsoft attorneys argued that the clause regarding compatibility (section 2.6 of the TLDA), meant that if Microsoft's adds a new API, Sun can test for it. Microsoft attorneys and witnesses, particularly Peter Lee from Carnegie-Mellon university continuously tried to confuse the issue by stating that once a developer uses an OS-specific feature, the developer does not expect the program to run on another machine. This may be true but is not relevant to the case. Platform dependent code/libraries are not at trial here, it is the interface that is used to create such code/libraries that is at trial. Sun acknowledges the fact that interface code such as for hardware devices may be platform dependent and may have to be provided for each platform that the program is expected to run on. However, the interface used must not change. JNI is the standard interface supported by JAVA for this purpose, not RNI as implemented by RNI.

The above statements could have been made due to a pure misunderstanding and misinterpretation of the contract clauses. However, it is more likely that these were attempts by Microsoft to confuse the court and divert attention from the real issues of the case. It seems like Microsoft is attempting to persuade the court that there has been a "misunderstanding of facts" and a true "meeting of minds" between Microsoft and Sun had never occurred.

Throughout the case Microsoft has also engaged in shady legal maneuvers. The usual sequence in U.S. jurisprudence is for the defense to go after the plaintiff, since the burden of proof lies on the plaintiff. However, in this case Microsoft volunteered to go first in presenting its case. Although it seems unusual and difficult to understand why, at first, it does become clear as the proceeding progresses. The VP of Microsoft Tools and Application Division, Robert Muglia, testified at length about Microsoft's understanding of the contract and their intentions. Sun listened patiently. However, when Sun's Alan Baratz was testifying, Microsoft attorneys bombarded the court with objections, most of which were overruled. Microsoft later wanted to recall Muglia. Sun objected since they would not have the opportunity to cross-examine Muglia.

Fortunately for Sun, the court decided that Sun would equal time to recall Baratz. Later Microsoft decided not to recall Muglia.

While it is entirely possible that Microsoft did not have any mal-intentions in mind and that the play of events was entirely coincidental, it does raise serious doubts about the credibility and validity of Microsoft's case (response) against Sun. In my opinion if Microsoft really believed that they were on the good side of the law, they would not resort to petty courtroom games such as the above.

Comments

Sun has submitted unrebutted evidence demonstrating that Microsoft literally copied substantial portions of Sun's copyrighted source code and distributed incompatible products based on that copied code, thereby exceeding the scope of its license under the TLDA, and infringing Sun's copyrights. Section 2.6(a)(vi) of the TLDA expressly limits the scope of Microsoft's license to distribute commercial products to compatible products only. The scope of Microsoft's license under the TLDA is defined in Article 2.0, entitled "License Grants." SER 205-12. Pursuant to section 2.2(a)(iii), Sun granted to Microsoft a nonexclusive license to "make, use, import, reproduce, license . . . sell or otherwise distribute to end users as part of a Product or an upgrade to a Product, the Technology and Derivative Works thereof in binary form." SER 206. Section 2.6(a)(vi), however, further limits the scope of Microsoft's license to distribute Products as follows: "Licensee agrees that any new version of a Product that Licensee makes commercially available to the public after the most recent Compatibility Date shall only include the corresponding Compatible Implementation . . . ." SER 209. Thus, in the "License Grant" of the TLDA, the scope of Products Microsoft is licensed to distribute commercially is expressly limited to only such Products as pass Sun's compatibility test suite.

Thus, it all boils down to the simple fact that the purpose of JAVA is to enable cross platform operability. By including support in the Microsoft JAVA compiler for extended features that are not

part of the JAVA language and by not supporting the JNI in the Microsoft VM, Microsoft has

provided an avenue to defeat this purpose. Additionally, Microsoft's IE 4.0, SDKJ 2.0, and pre-

release versions of Visual J++ 6.0, SDKJ 3.0, and Windows 98 fail to pass Sun's JCK 1.1a Test

suite. This is a clear breach of the contract.

Both Sun and Microsoft have a lot at stake here. This is especially true for Microsoft with the

impending DOJ antitrust suit hanging over its head. There is no doubt that the outcome of this

case will have a domino effect on the antitrust case. As a truly ground breaking case, the

outcome of this case will set a precedent for the software industry as a whole for many years to

come. Considering all the issues of the case with the preliminary arguments for each issue

presented by both sides, it seems that Microsoft has not as it claims acted in good faith of the

contract which to me indicates that Sun Microsystems is likely to win the lawsuit.

Latest Developments

On November 18th, 1998, District court Judge Ronald Whyte granted Sun Microsystems its

request for a preliminary injunction in its JAVA technology lawsuit against Microsoft, forcing

Microsoft to make changes to some of its key software products, namely Windows 98, IE 4.0, and

Microsoft's JAVA SDK. Microsoft was given 90 days to make the changes. The court also found

that Microsoft acted anti-competitively by forcing software licensees to exclusively distribute

Microsoft's JAVA technology in order to be allowed to use a "Designated for Windows 95/NT"

logo on their products. On December 7th , 1998, Microsoft released its latest version of the JAVA

VM which included support for JNI. On January 14th , 1999, arguing that the court erred in its

interpretation of Microsoft's contract with Sun, Microsoft filed an appeal of the preliminary

injunction with the U.S. Appeals Court in San Francisco. On February 18th, 1999, the U.S district

court granted Microsoft permission to distribute "independently developed" Java products that do

not include technology from Sun. Clarifying its injuction ruling made on November 18th, 1998, the

court stated that the injunction does not apply to such "independently developed" products. The

court is scheduled to review the motion for summary judgement on March 12th, 1999. **As of today no date for the trial has been set.**

References

1. Sun Microsystems Trademark License Agreement

2. Sun Microsystems Technology License and Distribution Agreement (TLDA)

3. Microsoft Website (http://www.microsoft.com/java/issues/sunsuit.h)

4. JAVAsoft Website (http://www.javasoft.com/lawsuit)

5. Articles from PC World News (October '98, November '98)

Trademarks

- JAVA is a registered trademark of Sun Microsystems, Inc.

- Microsoft IE 4.0, SDKJ, Visual J++, and Windows 95/98/NT are all registered trademarks of Microsoft Corporation.