# Foreword: "Article of Manufacture" Patent Claims for Computer Instruction, 17 J. Marshall J. Computer & Info. L. 1 (1998)

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# FOREWORD

## SYMPOSIUM: "ARTICLE OF MANUFACTURE" PATENT CLAIMS FOR COMPUTER INSTRUCTION

### by ALLEN B. WAGNER

Whether computer instruction is patentable as an "article of manufacture," distinct from and in addition to patenting software as a process or machine, is a significant consideration in the patenting schema for software related inventions.

At Oracle Corporation's initiative, George Washington University Law School and the Software Publishers Association agreed to co-sponsor a symposium dedicated to the examination and discussion of the propriety of "article of manufacture" patent claims for machine instruction embedded on computer readable media or carrier waves. As a collaborative effort between the academic and corporate communities, the symposium, *Article of Manufacture Patent Claims for Computer Instruction,* was lauded as an innovative and appropriate model for probing such legal issues.

In anticipation of the symposium, Oracle initiated a writing grant program providing law professors and students full academic freedom to articulate their perspectives on this issue. In addition, Oracle encouraged representatives from government, industry and the Bar to contribute their critical and practical thinking. Prospective commentators were charged to consider whether computer instruction on a computer readable substrate can be both a copyrightable "expression" *and* a patentable "embodiment," whether patents are limited to utilitarian physical embodiments of innovative ideas, whether machine instruction can be considered a patentable "component" of a machine, and, finally, whether such claims satisfy the statutory requirements of enablement and definiteness. Submitted papers were presented at the Symposium. Publication of the papers in *The John Marshall Journal of Computer & Information Law*, provides an opportunity to stimulate further discussion on the appropriateness of "article of manufacture" patent claims for computer instruction.

It is evident from the thoughtful, yet widely divergent views presented in the following articles that the patentability of software generally, and as an "article" specifically, continues to vex our intellectual

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property schema. As the papers show, the question opened a diverse exploration of concerns, issues and perspectives.

Both Oracle and Professor Karjala explore which intellectual property schema, patents or copyright, is most appropriate for computer instruction protection. In his paper, *The Relative Roles of Patent and Copyright in the Protection of Computer Programs*, Professor Karjala advocates communication between patent and copyright attorneys to clarify the ambiguity between copyright and patent subject matter areas in relation to computer programs. He asserts that, while literal program code is appropriately protected by copyright, the functional aspects of the code should be only patentable. Oracle's paper, *Patenting Computer Science: Are Computer Instruction Writings Patentable?*, on the other hand, delves into the fundamental principles of intellectual property law and the nature of computer science (in contrast to natural science) ingenuity. On "article" claims Oracle concludes such claims impermissibly extend patent law from utilitarian embodiment into the copyright domain of abstract expression and provide the computer hardware industry two compensations for one invention embodiment as well as a means to dominate independent software development. Practitioner Jeffrey Kuester in his paper, *A New Frontier in Patents: Patent Claims to Propagated Signals*, identifies an additional practical implication of "article of manufacture" patent claims—the extension of such claims to propagated signals, and the concomitant expansion of potential direct infringers.

Jeffrey Draeger, the 1997-98 Oracle Intellectual Property Student Writing Competition award winner, in his paper, *Are Beauregard's Claims Really Valid?*, addresses the initial questions raised by Oracle. He examines the legal and technological bases for "article" software claims and concludes that, although such claims lack a solid judicial foundation, they are statutory in that the storage of computer instruction turns a computer readable medium into a functional machine "component." Like Mr. Draeger, Professor Vincent Chiappetta considers software to be a separate component of a computer system. Professor Chiappetta, in his paper, *Patentability of Computer (Software) Instruction as an "Article of Manufacture:" Software As Such as the Right Stuff*, lauds the abandonment of the mathematical algorithm approach by the courts and the Patent & Trademark Office, but remains dissatisfied with the current hardware reliant framework. He advocates a new "software as such" test which would allow "article" claims which limit software functionality to computer system implementation.

In *An Attempt to Rationalize Floppy Disk Claims*, Professor Richard Stern identifies the potentially significant problem of overbreadth inherent in the use of "article" claims. He asserts that current drafting techniques may result in "article" claims which are far greater in scope than their corresponding machine or process claims, and proposes legislation

to appropriately limit claim breadth to prevent patenting of otherwise nonstatutory algorithms and nonpatentable prior art.

Finally, Professors John Thomas and Carl Moy refocus attention on the "invention," the patent instrument and claim formats. In *Of Text, Technique, and the Tangible: Drafting Patent Claims Around Patent Rules*, Professor Thomas distinguishes the patent claim formats of artifact and technique and laments that by manipulating these formats, clever claim drafters can easily draft around the patent statute to expand subject matter scope. He conducts an ontological study and identifies the "article of manufacture" claim, which he characterizes as "drafting of encoded software instruction as artifact," as being no more than the "vessel" for capturing a software method. Professor Thomas concludes that the encoded instruction is simply the expression of a function, and is not made patentable by the act of placing it on a vessel or substrate. Professor Carl Moy's focus in his paper, *Statutory Subject Matter and Hybrid Claiming*, is on so-called "hybrid" inventions—inventions which consist both of statutory and non-statutory elements. He identifies and criticizes the PTO's "blue pencil rule," which struck nonstatutory elements out of a claim, allowing a claim to be deemed statutory as long as any element of the claim was considered statutory. Professor Moy advocates providing rule-based, clearly documented guidelines for handling hybrid inventions so as to avoid issuing patents for non-statutory advances.

On behalf of the Symposium writers and sponsors we invite you to read the papers and consider the notions raised by the question: *Is mere machine instruction embedded on computer readable media patentable as an "article of manufacture?"*

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