

No. 2016-120

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**IN THE**  
**UNITED STATES COURT OF APPEALS**  
**FOR THE FEDERAL CIRCUIT**

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IN RE TRADING TECHNOLOGIES INTERNATIONAL, INC.

*Petitioner.*

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On Petition for a Writ of Mandamus to the United States Patent and Trademark Office, Patent Trial and Appeal PTAB, Case CBM2015-00161

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**BRIEF OF AMICUS CURIAE MARTIN A. GOETZ IN  
SUPPORT OF TRADING TECHNOLOGIES INTERNATIONAL, INC.**

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## CERTIFICATE OF INTEREST

Pursuant to Fed. Cir. R. 47.4 and Fed. R. App. P. 26.1, counsel filing this brief for the *Amicus Curiae* Martin A. Goetz certifies the following:

1. The full name of the amicus on behalf of whom I am filing this brief is: Martin A. Goetz.
2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is: N/A.
3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the amicus curiae on behalf of whom I am filing this brief are: N/A.
4. The names of all law firms and the partners or associates that appear for the amicus are: Christopher N. George of Hanley, Flight & Zimmerman, LLC.

Dated: March 15, 2016

Respectfully submitted,

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**STATEMENT OF THE IDENTITY OF THE AMICUS CURAE, ITS  
INTEREST IN THE CASE, AND THE SOURCE OF ITS AUTHORITY TO  
FILE**

Martin A. Goetz (“Mr. Goetz”) has over fifty years of experience in the software products and services industry. For example, he was a programmer for Sperry Rand and IBM from 1954 to 1959. He was a founder (in 1959) and later President of Applied Data Research (“ADR”), a \$250 million company that was traded on the N.Y. Stock Exchange prior to its acquisition by Ameritech in 1986. During his twenty-eight years at ADR, he helped to establish ADR as one of the leading companies in its field. ADR was the first company to sell a software product commercially, and it pioneered the start of the software products industry in 1965. Martin was awarded the first U.S. “software patent” in 1968 (U.S. Patent No. 3,380,029).

Mr. Goetz has testified as an expert witness for the Justice Department in an IBM suit in 1976. In 1989, he was elected to the Infomart Computer Hall of Fame along with Bill Gates. In February 2000, Mr. Goetz was elected to the New Jersey Inventors Hall of Fame. In 2009, Mr. Goetz was elected to the Mainframe Hall of Fame. The first half of his memoirs “Memoirs of a Software Pioneer: Part 1” was published in the IEEE Annals of the History of Computing, Jan-March 2002. The second half was published in the Oct-Dec 2002 issue.

Mr. Goetz is a leading advocate of software product protection through copyright and patent law, and his leading role in combating unfair competitive practices in software by hardware manufacturers is widely recognized. For the last forty years through articles and speeches, Mr. Goetz has helped promote the status and growth of the independent software industry. Mr. Goetz has been a featured speaker at industry and user forums and has written over fifty articles in leading trade publications. Currently, he is a private investor and management consultant to software product firms and venture capital firms.

Mr. Goetz is submitting this amicus brief in response to the institution of a Covered Business Method (“CBM”) proceeding by the Patent Trial and Appeal Board (“PTAB”) panel of the U.S. Patent and Trademark Office (“USPTO”) in CBM2015-00161. Mr. Goetz believes that the PTAB has wrongly characterized U.S. Patent No. 6,766,304 (“the ‘304 patent”), which is related to an improved graphical user interface, as a “business method patent” rather than a technological invention. Mr. Goetz also submits that the PTAB is wrong in categorizing Trading Technologies as being a part of the Financial Services Industry rather than a traditional software and technology company. This decision to institute under Section 18 of the America Invents Act (“AIA”) opens the door to review of patents falling outside the scope of “covered business methods”. Such scope exceeds Congressional intent and the USPTO’s mandate under the AIA.

Pursuant to Fed. R. App. P. 29, all parties have consented to the filing of this amicus brief. No counsel for a party, other than Amicus Curiae Martin A. Goetz, authored this brief in whole or in part, or made a monetary contribution intended to fund preparation or submission of this brief.

### **SUMMARY OF THE ARGUMENT**

Software products produced by software technology companies are not just “software ideas” or “business methods”. A software product is often a complex technological product that is manufactured, maintained and enhanced similar to products in other industries (e.g., computer hardware products or cell phone products). A software product’s graphical user interface (“GUI”) is an important technological element that allows interaction with the software product and enhances the functionality and operation of the software product. In this instance, the PTAB panel has decided to ignore the elements of the claims reciting a GUI tool or device, focusing instead on potential, unclaimed applications of that GUI tool or device. Such speculation on unclaimed use is improper and unacceptable. Rather, the claimed methods and media recite an interactive GUI tool that addresses technological problems of efficiency, speed, accuracy, and usability in an associated software product. This technological invention does not fall within the bounds of the CBM review.

## ARGUMENT

Mr. Goetz encourages the Court of Appeals for the Federal Circuit to review and grant the relief requested in the mandamus petition by Trading Technologies as it has the potential to dangerously affect the software products that he and other software technology innovators develop, customize, and use. Mandamus is appropriate here because this decision by the PTAB appears to conflict with the stated rules and will impact many other patents related to GUIs and other software products.

Trading Technologies is very representative of most software product companies in that they develop their products in a very competitive environment. Trading Technologies is not a financial services organization such as a bank or an investment firm. Their products are developed by highly skilled software engineers and have long life cycles similar to products in other high technology manufacturing entities.

Many software products, such as Trading Technologies' X-Trader product, are state-of-the-art products developed in a very competitive, fast moving environment and require rapid response to meet user demand. A large amount of capital is often required for such software product development, and many software companies are funded through private investments, venture capital, and through public offerings. There are also active research and development activities

within these companies. IBM, for example, has reported that it consistently spends well over one billion dollars in research and development specifically in the software area.<sup>1</sup> Highly skilled personnel are employed in these companies and many have advanced Computer Science college degrees, including PhDs.

A software product development life cycle includes six phases: Definition, Design, Implementation, Delivery, Maintenance, and Enhancements. These phases are common to all manufacturing companies. Often, prior to the definition phase, there is research as well as competitive analysis. During the definition phase, a software company describes a product's functionality, its specifications, the environment in which it must operate, and its operating characteristics. During the design phase, the software technology company develops and defines interfaces for the software product, divides the functionality into modules, and applies software engineering so that the product can be properly implemented, maintained and enhanced during its lifecycle. During the implementation phase, the software product is debugged, tested, and verified through quality assurance. During the delivery phase, alpha and beta testing are conducted with the product, followed by documentation, installation, and training. Often, a software company serves as an Original Equipment Manufacturer ("OEM") to provide the software product to

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<sup>1</sup> *IBM to invest more than \$1 billion to develop storage software*, <http://www.marketwatch.com/story/ibm-to-invest-more-than-1-billion-to-develop-storage-software-2015-02-17> (last visited March 14, 2016).

another company where the software becomes a component of a larger system and is re-packaged. During the maintenance phase, the software company warrants its workmanship and guarantees the correction of errors and defects. Finally, during the enhancement phase, the software product is improved, enhanced, upgraded, and new models (releases) are announced. Clearly, these phases can also apply to any manufactured product (e.g., car parts, computer hardware, communications equipment, medical devices, etc.) and are indicative of technological innovations, not financial methods.

Section 18 of the AIA provides a transitional covered business method (“CBM”) review for patents which claim a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include patents for technological inventions. American Invents Act §18(d)(1). For example, the legislative history explains that the definition of covered business method patent was drafted to encompass patents “claiming activities that are financial in nature, incidental to a financial activity or complementary to a financial activity.” 157 Cong. Rec. S5432 (daily ed. Sept. 8, 2011) (statement of Sen. Schumer).

In evaluating what is a technological invention, the PTAB is instructed to consider whether the claimed subject matter as a whole recites a technological

feature that is novel and unobvious over the prior art, and solves a technical problem using a technical solution. 37 CFR § 42.301(b). The USPTO's Practice Guide for Proposed Trial Rules provides examples of covered business method patents that are subject to a covered business method patent review. One example is a patent that claims a method for hedging risk in the field of commodities trading. Another example is a patent that claims a method for verifying validity of a credit card transaction. 77 FR 48764 (Aug. 14, 2012) (emphasis added).

Still other examples are given in the USPTO Practice Guide for Proposed Trial Rules of a patent that claims a technological invention which would *not* be subject to a covered business method patent review. One example is a patent that claims a novel and nonobvious hedging machine for hedging risk in the field of commodities trading. Another example is a patent that claims a novel and nonobvious credit card reader for verifying the validity of a credit card transaction. 77 FR 48764 (Aug. 14, 2012) (emphasis added). The GUI tool claimed in the '304 patent aligns with these examples indicated as claiming a technological invention and not subject to a CBM review. Patents subject to covered business method patent review are anticipated to be typically classifiable in Class 705. 77 FR 48739 (Aug. 14, 2012). As defined by the USPTO, Class 705 includes applications related to data processing: financial, business practice, management, or cost/price determination.

However, as described above, the software products made by Trading Technologies and many others are not simply data processing for financial, business practice, management, or cost/price determination. Instead, they more readily align with other USPTO classifications for technological inventions. For example, Class 710 relates to input/output for electrical computers and digital data processing systems. The GUI tool recited in the claims of the '304 patent could fall under this definition. Class 715 relates to data processing for presentation processing of document operator interface processing, and screen saver display processing and its art units 2141-2144 and 2170-2179 are referred to by the USPTO as the "Graphical User Interface and Document Processing" art units.<sup>2</sup> Further, Class 345 includes computer graphics processing and selective visual display systems. Clearly, the claimed subject matter of the '304 patent better fits in these classifications (345, 710, or 715), not as a financial or business method in Class 705. Just as clearly, the claimed subject matter of the '304 patent represents a technological invention in the form of a GUI tool that solves a technical problem in its computer system and improves the functionality of its associated computer system.

Software products from software companies are not just "software ideas", are not "abstract", and are not "business methods". A software product is often a

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<sup>2</sup> See, e.g., <http://www.uspto.gov/patent/contact-patents/patent-technology-centers-management> (last visited Mar. 14, 2016).

complex technological product that is manufactured, maintained and enhanced similar to products in other industries (e.g., computer hardware products or cell phone products) entitled to patent protection and not subject to the limited scope of additional review envisioned by Congress in the transitional CBM review program of the AIA.

GUIs are an important part of software products developed by software engineers to display information, tools, etc. Here, the '304 patent claims a GUI tool to solve a GUI problem, not a problem of the financial services industry. The '304 patent is directed to more effectively displaying data for a user on a GUI, rather than claiming a computer used in performing a financial transaction. Such technological invention should not be the subject of a CBM proceeding, and institution in this case is in clear error.

## CONCLUSION

On its face, this patent is not a CBM within the jurisdictional bounds of Section 18 and, therefore, Martin A. Goetz requests that the Federal Circuit grant the relief requested in Trading Technologies' mandamus petition.

Dated: March 15, 2016

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## CERTIFICATE OF COMPLIANCE

This brief complies with the page limitation of Fed. R. App. P. 21 (d) and 29(d), and contains 10 pages. The brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionally-spaced typeface using Microsoft Word 2010 in 14-point Times New Roman type.

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## CERTIFICATE OF SERVICE

On March 15, 2016, Mr. Goetz authorized me to electronically file the foregoing Brief of Amicus Curiae Martin A. Goetz in support of Petitioner Trading Technologies with the Clerk of the Federal Circuit using the CM/ECF System, which, we understand, will serve email notice of such filing on the following:

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Six paper copies will be filed with the Court within the time provided in the Court's rules.

/s/ Christopher N. George  
Christopher N. George

March 15, 2016