

IN THE UNITED STATES DISTRICT COURT FOR THE
EASTERN DISTRICT OF VIRGINIA
Alexandria Division

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TRIANTAFYLLOS TAFAS,)	
Plaintiff,)	
v.)	
JON W. DUDAS, <i>et al.</i> ,)	1:07cv846(JCC/TRJ)
Defendants.)	
)	
)	
_____)	

CONSOLIDATED WITH

_____)	
SMITHKLINE BEECHAM CORPORATION, <i>et al.</i> ,)	
Plaintiff,)	
v.)	
JON W. DUDAS, <i>et al.</i> ,)	1:07cv1008(JCC/TRJ)
Defendants.)	
)	
)	
_____)	

**BRIEF OF *AMICUS CURIAE* R&D LICENSING COMPANIES ON THE ISSUE OF THE
IMPACT OF THE PROPOSED USPTO RULES ON *AMICI* BUSINESS MODEL**

I. INTRODUCTION OF *AMICI*

GSK has consented and neither the Government nor Tafas oppose the filing of this brief on behalf of AmberWave Systems Corp., Fallbrook Technologies, Inc., InterDigital Communications, LLC, Nano-Terra, Inc. and Tessera, Inc. (collectively the “R&D Licensing Companies” or “*Amici*”).

A. *AmberWave Systems*

AmberWave Systems Corp. was founded in 1998 to answer the market demand for a technology development organization that could commercialize Silicon Germanium-graded

buffer technology from the Massachusetts Institute of Technology. AmberWave's technology is a result of more than \$90 million in venture capital investment and 15 years of research at the Massachusetts Institute of Technology, AT&T Bell Labs, and its own advanced research facility in Salem, New Hampshire. AmberWave invests millions of dollars annually in research and development. Because the semiconductor, solar energy, and solid state lighting technology markets are complex, diverse, specialized, and increasingly disaggregated, AmberWave licenses portions of its technology to manufacturers of technology components and to firms that ultimately use and benefit from the technology.

This intellectual property business model of innovation, patenting, licensing and tech transfer was recognized early on as the best way to achieve efficiency in bringing new materials to the consumer, as for example, the company's first technology platform – SiGe for strained silicon. If you own a computer purchased new during the past three years, it more than likely contains AmberWave Systems' technology buried deep in the microprocessor. AmberWave System is dedicated to the continued effective use of this model. AmberWave has an extensive patent portfolio on the three most important technologies for combining the power, speed and optical properties of Group III-V semiconductors with the economics of silicon device production.

B. Fallbrook Technology

Fallbrook Technologies Inc. is based in San Diego, California, with a research and development facility located near Austin, Texas. Fallbrook is a technology research and development company. Fallbrook's core technology is its traction-based, NuVinci™ transmission – a continuously variable planetary (CVP) drive ideally suited for applications in virtually any mechanical device that has a transmission, or which requires speed variation. The company currently holds over 25 issued patents worldwide, with more than 80 additional

pending applications. Fallbrook works with other companies to commercialize its NuVinci technology and additionally provides design, development, and manufacturing support.

As an intellectual property (IP) licensing company, Fallbrook has partnerships with manufacturers, companies that manufacture NuVinci CVPs and/or parts, and with original equipment manufacturers (OEMs) that integrate the NuVinci CVPs supplied by Manufacturers into products or vehicles ultimately sold to consumers. Fallbrook's licensing program is designed to create a community of technology around the NuVinci CVP.

C. *InterDigital Communications, LLC*

InterDigital Communications, LLC and its affiliates (together, "InterDigital") invent and develop leading technology and pioneering solutions for the wireless communications industry. InterDigital's roots date back to 1972 and it employs approximately 240 engineers. As the result of its engineering efforts, InterDigital has generated in excess of 950 U.S. patents and derives much of its revenues from licensing its patents and technology to leading companies that design and/or manufacture cellular telephones and other mobile terminal devices. InterDigital's licensees include Apple, LG, NEC, Sharp, Research in Motion, Ericsson, Nokia and Sony-Ericsson.

In addition to licensing its technology and patents to several of the world's leading companies, InterDigital is close to releasing a high performance modem optimized for mobile data. The modem will deliver instant and flexible wireless broadband capability for innovative computing, gaming and multimedia devices. InterDigital also expects that cell phone operators will get increased network capacity, better coverage and increased data rates, and that modem users themselves will have predictable broadband experience and good battery life.

D. Nano-Terra Inc.

Nano-Terra Inc. is based in Cambridge, MA, and is a privately-held research and development company employing 30 people, primarily scientists. Its executive team is experienced in proving the value of early stage technologies and creating successful new ventures. The company has field-exclusive licenses to more than 55 patents on work done by co-founder Dr. George Whitesides. Through his work at the renowned Whitesides Lab at Harvard University, Dr Whitesides is the winner of the 2007 Priestley Medal for distinguished contributions to chemistry, a past recipient of the National Medal of Science, and past winner of the prestigious Kyoto Prize. Through its international network of scientists and academic collaborators, Nano-Terra is acquiring more patents as well as developing its own IP in-house in order to create paradigm-shifting products and technologies. Nano-Terra advisors have been active and successful in creating valuable early stage ventures that resulted in numerous successful companies. For example, Professor Whitesides alone has been involved in over a dozen start-ups over the years, with an aggregate market value in excess of \$20 billion.

Nano-Terra has pioneered an innovative collaborative business model based on the ability to capitalize on its patents. Nano-Terra strikes licensing and development agreements with key consumer and industry brand leaders to produce nano- and micro-technology solutions to address specific business needs. Using Nano-Terra tools and patents as an “operating system,” the model enables the development of specific solutions across a variety of disciplines, from consumer products to military applications; the partner gains an innovative product and Nano-Terra benefits from a licensing and royalty revenue stream. By bridging this gap between academia and commerce, Nano-Terra develops ground-breaking products for the partner to bring to market and determines what new capabilities and functions will create substantial value.

E. Tessera

Tessera is a leading provider of miniaturization technologies enabling the component industry to build smaller, faster, and more reliable electronic products. Tessera presently has over 360 issued United States patents and over 50 licensees in the area of computer chip packaging technology, including the world's top component companies such as Intel, Samsung, Renesas, Toshiba and Texas Instruments, as well as a number of universities. Over 4.5 billion computer chips incorporating Tessera's miniaturization technology have been integrated into a range of wireless, computing, gaming, entertainment, medical, and defense-related electronic products. Tessera's ability to continue to innovate depends upon its ability to create and maintain a robust and flexible intellectual property portfolio, license its technology and enforce its issued patents.

II. INVENTIONS FORM THE CORE OF EACH *AMICUS*' BUSINESS

Inventions inherently form the core of the business model of each *Amicus*, as research and development organizations. Indeed, virtually the entire value of each *Amicus* is embedded in its IP portfolio and IP rights. *Amici* are all acknowledged innovators in their fields of technology. Each began as a startup company devoted to innovating more than its larger and more established competitors. The quality and sophistication of their inventions has been and continues to be the major driving force in their growth and success. Their innovation, and the ability to protect their innovation, has allowed them successfully to seek and obtain investment capital, revenue growth, and increased profits needed to expand their enterprises.

Each *amicus* operates in the highly competitive, often cut-throat global marketplace. Each must maximally leverage its inventions to obtain the needed return on investment for its investors and to protect and grow its enterprise. Manufacturing has become a global competition with increasing pressures to operate in the least costly locales. To remain globally competitive,

Amici must leverage their inventions over the maximum numbers of products and services to be positioned to compete in the next round of innovation in their technology sectors. The business model of each *amicus* is a highly competitive and innovative research and development paradigm where each typically licenses the fruits of its R&D to a diverse group of licensees that incorporate the licensed innovation into their products and services. This trans-national R&D licensing business model is totally different from the traditional vertically integrated regional manufacturing enterprise of the past.

The core of the R&D licensing business model is a strong and flexible patent portfolio that protects innovations in every way possible so that the patents can be effectively, efficiently and profitably licensed to as many licensees on the world stage as possible. Further, a creative and flexible patent portfolio is required to stop sophisticated infringers who often look to exploit the innovator's patents. *Amici*, unlike their larger (and often older) competitors, cannot necessarily rely on manufacturing, marketing, and distribution chain efficiencies to support their business model. Nor can they compete with lowest cost producers that do no R&D. Instead they must rely on robust and flexible IP portfolios, particularly patents, which legally and thoroughly capture their innovations so that they can be optimally licensed and enforced. It is thus imperative to *Amici*, who until now have been willing to engage in expensive, time consuming and often highly speculative and risky R&D, that the U.S. patent laws and practice allow them the flexibility needed to cover every aspect of their innovations.

III. MANY INVENTIONS BY *AMICI* REQUIRE COMPREHENSIVE AND FLEXIBLE PATENT PORTFOLIOS

The type and quality of the inventions made by *Amici* in their R&D activities inherently require comprehensive and flexible patent portfolios to protect effectively and fully the core

inventions and all of the applications, enhancements, and follow on inventions that often flow from these core inventions.

The memoranda filed by the Plaintiffs and other supporting *Amici* briefs should make it apparent that the proposed USPTO rules are antithetical to the comprehensive patent portfolios that are required by the business models of *Amici* and other innovation enterprises. The effective limits on continuation applications and on the number of claims take away the flexibility and thoroughness required by innovators to compete effectively in a global marketplace. This brief provides two scenarios involving different types of core inventions that are representative of those encountered by *Amici* in their respective IP portfolios and are illustrative of the devastating impact the proposed USPTO rules would have.

The first example involves a core invention that is fundamental in its technological significance. *Amici* submit that companies employing their business model make a disproportionate percentage of such breakthrough inventions and thus form the backbone of U.S. innovation and industrial competitiveness. The core invention almost always leads to many other inventions that flow from it. Some of these are specific applications, others are enhancements, and still others are extensions of the core invention to other technology fields or combinations. A hypothetical example is a new wireless radio transmitter that is a fundamental departure from prior transmitter designs. This new wireless transmitter can be applied to many traditional wireless applications (e.g., cell phones, data networks, garage door openers, transponders, etc.), can be enhanced for greater performance metrics (e.g. smaller size, greater efficiency, lower cost, lower power consumption, higher spectral purity, etc.), and can be extended to be incorporated with other technologies (e.g., toys, appliances, vehicles, finance, etc.). The flexibility of the current USPTO rules allows the *Amici* to seek patent protection for

all of the inventions that flow from the wellspring of the core invention. In many cases this process will include obtaining patents with far more than 25 total claims.

The second example involves a core invention that may be applied to products and services where at each level of the product/service chain, patent claims are needed to protect the innovation and extract the appropriate value so that the composite return fairly compensates the inventor. The manufacturing, distribution and service offerings of the products and services worldwide requires a robust creative and flexible patent portfolio that protects the core invention at each level of the product/service chain. Take the hypothetical transmitter invention example applied to a wireless product (e.g. cell phone) as an illustration. *Amici*' business model requires patent claims that cover the application or integration of the core transmitter invention *at each level of the chain*: e.g., the wireless chip, product internal circuit board, the product itself, the use of the product in a wireless network, and applications of the product for specific uses (e.g. stock quotes, weather reports, 911 calls with location tracking, etc.).

Each of the *Amici* have patent families organized around the above described examples upon which they currently rely to flexibly and completely protect and leverage their ongoing innovation. For example NanoTerra has obtained U.S. Patent Nos. 5,776,748; 5,976,826; 6,368,838; 7,067,306, all of which are continuations that stem from an original omnibus disclosure. These four patents, which are owned by Harvard University, protect a core technology for NanoTerra that is related to methods for derivatizing and patterning surfaces by microcontact printing processes to produce devices comprising differing bioadhesive properties. The surfaces and devices can be used, for example, in medical device and medical diagnostic applications. Each patent in the family includes claims directed to different aspects of the core invention. For example, within the patent family are claims to methods for patterning surfaces,

methods for immobilizing cells on the patterned surfaces, methods for using the patterned surfaces to control cell growth, methods for performing assays on cells adhered to a surface, and methods to prepare devices comprising the patterned surfaces. The patent family also includes claims covering devices that fall within different embodiments of the core invention.. This patent family includes a total of 98 issued claims, 16 of which are independent and there is a pending continuation application US Appl. No. 11/331,849, which seeks additional claims.

Another example is U.S. Patent No. 7,044,884 issued to Fallbrook Technologies. This patent, which is directed to a support frame assembly for Fallbrook's continuously variable planetary transmission, is a seventh generation continuation in a patent family that began with U.S. Patent No. 6,241,636. The '636 Patent was an omnibus disclosure that issued with 40 claims (5 of which were independent) directed to Fallbrooks core transmission. Much of the claimed subject matter in the '884 Patent was not fully appreciated until much later in the commercial development of Fallbrooks core technology. The highly valuable '884 Patent, which has 2 independent claims and 20 total claims, could not have been filed under the proposed USPTO rules.

The other *Amici* have similar patent families upon which they currently rely to fully protect and leverage their innovations. Under current USPTO rules the inventor of such families of inventions can obtain robust, comprehensive patent portfolios in a timely, cost-effective and flexible manner that allows patenting of an unlimited number of claims if necessary to cover all commercially significant aspects of the inventions. As in the above examples, patent portfolios often begin with the filing of an "omnibus" patent application that describes the core invention and all basic embodiments known at the time of filing. Additional continuation, divisional and continuation-in-part patent applications are later filed claiming priority to the omnibus

application so that the patent owner can obtain claims that cover all applications, extensions and enhancements at the various levels of the product/service chain. Requests for continued examination (RCEs) are used to avoid costly and time consuming appeals. With no arbitrary limits on the number of applications, RCEs or claims, the inventor can creatively and flexibly devise patent families that extract full value from the core invention in a timely and cost-effective manner.

Under the proposed USPTO rules, however, valuable patent families such as those described above would be impossible. As described next, *Amici* will instead be forced to pick and choose a select, small number of the possible embodiments for prosecution. Every innovation will be pressured to fit into only those embodiments that can be defined by the limited number of claims permitted so as to avoid the prohibitive ESD requirements. This rigid numerical limitation also means that *Amici* would likely not be able to seek immediate patent protection in the first prosecuted application for all of the commercially applicable embodiments of that invention or even delayed patent protection in one of the subsequent continuation applications, due to the arbitrary limits imposed on the number of claims, continuation and RCE applications.

IV. THE PROPOSED PTO RULES EVISCERATE THE ABILITY OF THE *AMICI* TO OBTAIN FLEXIBLE AND COMPREHENSIVE PATENT PROTECTION FOR THEIR INNOVATIONS

The current PTO rules allow the *Amici* to establish the robust and comprehensive patent portfolios using their current business model. Such portfolios require careful planning and intensive implementation effort. Each *Amicus* has made the massive investment in effort, time, and money that is required to build and maintain such patent portfolios. The proposed USPTO rules, with their arbitrary limits on the number of claims, RCEs and continuation applications, eviscerate the ability of *Amici* to obtain comprehensive and flexible patent protection.

A. The Arbitrary Limits on the Number of Claims Severely Impede Amici' Ability to Adequately Protect Their Innovations

The current rules place no limits on the number of claims that may be included in a patent application. This flexibility allows the *Amici* to comprehensively cover any particular innovation. The proposed USPTO rules arbitrarily limit applicants to five independent claims and a total of twenty-five total claims in a pending patent application without submission of an Examination Support Document (ESD). The evidence submitted by the Plaintiffs demonstrates that ESDs are not an option in the real world and that the PTO itself does not expect them to be used. *See Tafas' Summary Judgment Memo* at 35; Rueda Decl. Exs. 8-21). Combined with the limit of two continuation applications, patent application families under a best case scenario are effectively limited a total of 15 independent claims and seventy-five total claims.

A number of devastating implications stem from the proposed USPTO rules. First, the arbitrary limitation on the total number of claims withdraws the ability for inventors to fully protect their inventions in many situations. The patent system requires innovators to stake out the metes and bounds of their intellectual property using words. Claim drafting is a uniquely difficult exercise that is often done in a complete vacuum with respect to the competitive environment that the innovator will face as its innovation comes to market. This is particularly true for ground-breaking inventions. For this reason, application drafters are required to draft claims in a variety of different and creative ways to obtain the full scope of protection to which the inventors are entitled. In the situations described above, this is especially draconian. As the representative patents listed above show, the 5/25 claims limits are insufficient to cover the groundbreaking innovation that the *Amici* typically produce.

Second, applicants must file their 5/25 claim applications seriatim. This adversely impacts the time lines with which applicants can obtain patent protection. Typical prosecution

time for an application in the areas of technology of *Amici* is in the range of 3 to 5 years. The patent term is 20 years from filing the first non-provisional application. Assuming an applicant files three patent applications in a row, waiting to file each continuation until the prior application is allowed (as would be necessary under the proposed new rules in order to gain maximum coverage), the last application, if successful, will issue 9-15 years after the filing date, with only a few years left in the life of the patent. Since *Amici* are in technology areas where innovation is rapid and accelerating and product cycles are typically measured in 2-5 years and not in 10-20 years, this delay is commercially devastating. The disconnect between the rapidity of innovations and the slowest of any patent protection under the proposed USPTO rules is so great that *Amici* will be essentially denied meaningful patent protection even if they seek the full number of 75 claims that are theoretically available.

The Plaintiffs have addressed the impracticality of filing ESDs and *Amici* are in full agreement with those arguments. If *Amici* are forced to file ESDs to obtain the needed number of claims, at best this is a harsh tax and at worst an insurmountable impediment to innovation. The high cost of ESD practice under the proposed USPTO rules creates a financial barrier of entry to all but the largest and most financially successful competitors. *Amici* submit those are not the entities producing the greatest innovations.

B. Like the Limits on Claims, The Arbitrary Limits on the Number of Continuation Applications and RCEs Severely Impede the Amici's Ability to Protect the Full Scope of Their Innovation

The current rules place no limits on the number of continuation, continuation-in-part, and RCE applications that may claim benefit and/or priority back to an initial disclosure, provided of course all of the other statutory requirements are met. This flexibility allows *Amici* and similarly situated innovators to adjust their claiming strategy to take full and fair advantage of a rapidly developing marketplace.

The proposed USPTO rules limit a patent applicant to two continuation applications filed in seriatim claiming benefit of one original U.S. nonprovisional application filing. This is a radical departure from the current rules and contrary to the statute as Plaintiffs have argued. The heightened requirements for non-obviousness since the U.S. Supreme Court decision in *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007), have put added pressure on both USPTO examiners and on applicants. USPTO examiners are on a steep learning curve as they struggle to apply such new caselaw to *Amici*' emerging, innovative technologies. In such an environment, where the application of new caselaw to emerging technologies is far from being settled, applicants must be able to file as many applications as needed to fully protect all of their inventions. Now is not the time to limit the number of allowed patent applicants while the impact of the *KSR* decision plays out in the USPTO and the courts.

There are a number of devastating implications to the proposed USPTO arbitrary limitations on continuation applications. First, Applicants will be faced with a Hobson's choice in trying to overcome an examiner's rejection of claims, particularly for obviousness. The Applicant must either by using a precious second or third continuation to argue for a currently pending set of claims (instead of using a continuation to obtain claims to further embodiments) or to take a costly and very time consuming appeal to the Board of Patent Appeals and Interferences.

The second negative implication is that applicants simply cannot be omniscient at the time of filing. Competitors can monitor the patents of the innovator and find gaps in claim scope knowing that there is a severe limit in the prosecution choices available to the innovator. The current, well established and acceptable practice of using the continuation application to plug

holes in claim scope that become apparent only after the competitors' products have hit the marketplace is destroyed by the proposed USPTO rules.

The required petition to seek waiver of the applicant limits is essentially a fiction. As Plaintiffs demonstrate the USPTO itself has stated that such petitions will only be granted in very limited situations.

V. RETROACTIVE APPLICATION OF THE PROPOSED RULES COULD CAUSE *AMICI* EXTENSIVE ECONOMIC DAMAGE

Retroactive implementation of the proposed USPTO rules will upset the settled expectations of *Amici* and could severely reduce the value of currently pending families of applications. This effect is particularly pernicious where a patent family has already used up its arbitrarily allotted number of claims, continuation applications and RCEs. Further patentable subject matter residing in those patent families will lose its corresponding priority date and be effectively dedicated to the public domain. *Amici* made and continue to make huge investments in R&D under the assumption that they can seek full patent protection for all inventions that flow from it.

The precise economic value is difficult to estimate, but *Amici* should not be retroactively punished for their election of certain permissible prosecution and claiming strategies such as use of a cost-effective omnibus specification followed by a plurality of continuation applications. *Amici* planned, created, and prosecuted their comprehensive patent portfolios under the current rules, never contemplating the arbitrary and impermissible limits on number of claims, continuations, and RCEs under the proposed USPTO rules.

Some have argued that *Amici* may instead resort to trade secrets to protect their innovation. First, for pending applications, applicants have already elected to forego trade secret protection in favor of public disclosure. That information cannot now be recaptured and

protected as a trade secret. In short, retroactive application of the proposed rules may prevent an applicant from obtaining patent protection for trade secret information the applicant elected to include in an omnibus disclosure.

Second, notwithstanding the pernicious retroactive effect the proposed rules may have on a company's trade secret strategy, the proposed rules may also prospectively impact *Amici*' ability to protect their innovations. One of the requirements of trade secret protection is substantial secrecy. Should any of *Amici*' "secret" inventions be lawfully reversed engineered from the products and services possessing them once such products and services are put into the general stream of commerce by their creators, *Amici* will have lost valuable patent rights because the limitations in the new rules preclude comprehensive patent protection to cover permeations of the new inventions. In the fields in which the *Amici* practice, such reverse engineering is not uncommon or particularly challenging. Thus it is possible that such products and services will be denied both patent and trade secret protection. This reality would reduce the incentive to innovate.

If the proposed rules are retroactively implemented, *Amici*' competitors will be able to rapidly determine whether further patents will issue from a given patent family and act accordingly with any valuable information contained therein that has been effectively dedicated to the public. Alternatively, if innovators opt for trade secret protection, their competitors will find ample ways to lawfully obtain – *e.g.*, reverse engineer – the essential information needed to copy such trade secret protected otherwise patentable inventions. *Amici* and similarly situated innovators are thus stuck between a rock and a hard place – should they give full disclosure in return for greatly reduced patent protection under the proposed rules? Or, should they keep their innovation secret and risk reverse engineering? In either scenario, the innovative companies are

substantially damaged because of the loss of competitive advantage and their inability to monetize their R&D investment. In a global economy, competitors with lower cost of production would free ride on the R&D investment of such inventors. After several technology cycles this would make these innovators less competitive on the world stage because of their lower profitability.

Amici have spent significant time and money trying to figure out ways to save their valuable inventions from going into the public domain if the proposed USPTO rules are retroactively implemented. These costly and intensive efforts have revealed it will be very difficult, if not impossible, to achieve the same flexibility of claim drafting and claim numbers under these USPTO final rules.

VI. U.S. INNOVATION AND INDUSTRIAL COMPETITIVENESS WILL BE GREATLY HARMED IF THE PROPOSED USPTO RULES ARE IMPLEMENTED

The R&D licensing business model used by *Amici* and many other U.S. based innovators is state-of-the-art in a global, "world is flat" technological marketplace. Such a global marketplace drives each aspect of product and service offerings to the lowest cost locale. Lowest cost is required at each level of the business chain to produce the lowest aggregated cost of goods and services.

The R&D required to create world class innovation is expensive and risky. It involves deployment of cutting edge knowledge which is inherently expensive because it requires highly trained and educated people in high salaried jobs and insight required to produce superior R&D innovation. The labs and tools required for such R&D are very costly. The prices of such R&D continues to rise in many technological areas as the level of innovation advances. Fewer and fewer enterprises are often willing to make such R&D investments in many technological areas.

Many established, larger enterprises do not want to take such risks and instead wait for the innovation to come from the more risk-taking, innovation-oriented enterprises which typically are smaller and more nimble. Similarly, other entities having a lowest cost business model wait for innovation to be created by others and then copy it. Both models do not have the substantial R&D costs of the innovator model.

The R&D licensing business model also arises in many situations where the innovation has broad applicability and can be deployed ubiquitously to a large number of providers of products or services. The R&D licensing business model produces in the most effective and efficient manner the innovation that is used in the chains of many products and services. The participants in such chains do not have the economies of scale for such innovation possessed by the innovator model because they cannot leverage the R&D costs of the innovation over other chains. Thus, the R&D licensing business model produces essential innovation needed by these chains in the most cost effective manner.

The R&D licensing business model is alive and well in the U.S. economy in no small part due to the U.S. patent system which historically has been the world leader in robust and comprehensive patent protection. The U.S. patent system, and in particular the flexibility provided by the current USPTO rules, has allowed the R&D licensing business model to obtain the needed return on investment for the required R&D investment due to the ability to license the patented innovation.

The R&D licensing business model requires the comprehensive patent portfolios permitted under the current USPTO rules. Other industrialized economies have emulated the U.S. patent system approach and have allowed under their patent rules the creation of such comprehensive patent portfolios. The R&D licensing business model requires the availability of

such comprehensive patent portfolios in the major industrialized markets for effective licensing and return on investment. If the U.S. were to substantially curtail the availability of comprehensive patent portfolios, as would occur under the proposed USPTO rules, then the R&D licensing business model could be driven out of the U.S. market because innovation could be done at lower cost in foreign locales with lower costs of doing R&D.

The USPTO knows all of this because until recently it has been the world leader in promoting the R&D licensing business model. But the proposed USPTO rules effectively are an *about face* on this issue of national importance involving global industrial competitiveness. The USPTO has engaged in a "penny wise/pound foolish" strategy. It has put on its bureaucrat's hat and focused solely on an effort to curb its backlog of pending patent applications, but has ignored its broader obligation to the nation to protect America's technological and innovative primacy over the rest of the world.

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CERTIFICATE OF SERVICE

I hereby certify that on this 27th day of December, 2007, a copy of the foregoing BRIEF OF *AMICUS CURIAE* R&D LICENSING COMPANIES ON THE ISSUE OF THE IMPACT OF THE PROPOSED USPTO RULES ON *AMICT* BUSINESS MODEL was electronically filed with the Clerk of the Court using the CM/ECF system, which will send a notification of such filing to the following:

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