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# **ИНТЕЛЛЕКТУАЛЬНЫЕ ПРАВА: ВЫЗОВЫ 21-го ВЕКА**

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**MODERN APPROACHES OF THE U.S PATENT  
AND TRADEMARK OFFICE TO THE PROTECTION  
OF INVENTIONS THAT RELATE TO SOFTWARE,  
ALGORITHMS, AND BUSINESS METHODS.  
LITIGATION PRACTICE – PATENT TROLLS**

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**Abstract.** The article discusses the prospects of patenting new technological solutions such as blockchain technology and software in the United States of America. The author gives practical advice on a patenting strategy in the field of new technologies.

**Keywords:** Software patents, IT Market, Blockchain Patents, Patent Trolls, U.S. Supreme Court.

***Information Technologies Market in US.*** The United States has the most advanced software and information technology (IT) services industry in the world. More than 40 percent of the \$5 trillion global IT market is in North America, primarily in the United States. The industry accounts for \$1.8 trillion of U.S. value-added GDP (more than 10 percent of the national economy) and 11.8 million jobs. According to CompTIA ([www.cyberstates.com](http://www.cyberstates.com)), there are more than 525,000 software and IT services companies in the United States (approximately 40,500 tech startups were established in 2018 alone). This total includes software publishers, suppliers of custom computer programming services, computer systems design firms, and facilities management companies. The industry draws on a highly educated and skilled U.S. workforce of nearly two million people, a number which has continued to grow during the past decade.

The size of the IT market and its importance to the U.S. economy dictates close watch and need for avoidance of IT market disruption.

Patent trolls, which mainly operate in IT field cause IT market disruptions through its anticompetitive activities.

***Patent Trolls and the Resulting Changes.*** From the many well-publicized success stories, there is broad awareness that patent licensing can provide a good source for generating revenue. This holds true not just for large corporations, like IBM, but also for smaller organizations and inventors without the resources to commercialize inventions on their own. But there is growing public sentiment that patent licensing has been too good to the “wrong people” – those who have neither developed nor commercialized the patented technology they license, and who inappropriately have been characterized as undeserving to license and enforce their legal rights in the patents – the so-called “patent trolls.” Coupled with a growing public sentiment that “bad patents” or patents of bad quality are being granted by the U.S. Patent and Trademark Office and asserted by licensing companies, an environment of hostility towards patents and patent licensing is being generated and reflected in the media and in the U.S. Supreme Court.

The U.S. Supreme Court has been so concerned about patent trolls that in decision after decision concern over the chaos wrought by patent trolls has been explicitly discussed by the Court and explicitly lamented. Moreover, the Supreme Court has over and over concerned themselves with patent trolls (*eBay v. MercExchange*, *Halo Electronics and Commil USA, LLC v. Cisco Systems, Inc.*) despite no patent owner ever even being alleged to be a patent troll in a single case before the Court. While the Supreme Court is directly responsible for a series of decisions that have fundamentally changed the face of America’s innovation policy and future, the USPTO has enacted rule changes that now help the patent owners to protect their rights.

***Software Patents and Alice.*** In the United States software is patentable, and recent decisions from the U.S. Court are providing new hope that hasn’t existed in the industry for years.

Software related inventions are presented to the U.S. Patent and Trademark Office as computer implemented processes, but in the end it is software that is being protected. Software can be protected in the U.S. if it is unique and tied to a machine. Most importantly, to be patented software really needs to offer some kind of identifiable improvement.

Merely doing something that is known on a computer is extremely unlikely to be patentable. In other words, you cannot patent a process done in your head, but if that process leverages a tangible machine, such as a computer, now there is something that is patent eligible and which will receive a patent if it is described properly and is unique.

Much of the havoc wrought in the software patent system by the landmark decision *Alice v. CLS Bank International*, 134 S. Ct. 2347 (2014) stems from the unworkable two-part patent eligibility test based on vaguely defined and nebulous *Abstract idea* and *significantly more* constructs. The High court's reluctance or perhaps inability to precisely define these standards and the perceived lack of discernible consistency by the patent community in the way these standards have been applied in the compendious jumble of case law, has perpetuated a sense of uncertainty. This has prompted many to cast a grim prospect for the software patent industry.

Patentability of the Software Based Invention under Section 101 in light of October 2019 Update: Subject Matter Eligibility

The U.S. Patent Office's current eligibility guidance (PEG 2019) clarifies the examination procedure of the software-related patents. The 2019 PEG revises the procedures for determining a claim is directed to a judicial exception. The recently issued October 2019 Patent Eligibility Update (October 2019 Update) clarifies issues with respect to the 2019 PEG, particularly the groupings of abstract ideas enumerated in the 2019 PEG and the evaluation of whether a judicial exception is integrated into a practical application. The Berkheimer Memo revises the procedures for supporting a conclusion that an additional element (or combination of additional elements) represents well-understood, routine, conventional activity.

***Examples (Software Patents / Blockchain Technology Patents).***  
“The grant rate of Blockchain patents is quite similar to computer-implemented applications in general. In fact, the EPO considers these inventions as a type of computer-implemented invention.” Andrea Peronace

According to figures provided by the EPO, around 4,100 patent families relating to blockchain technology have been filed to date, 2,200 are in the first publication year and 286 are in the first grant year, with

an exponential growth since 2015. From the data presented, it appears that the worldwide grant rate is similar to that of other computer-implemented inventions.

40% and 20% of those patent families originated in China and the United States, respectively, with Europe and Korea ranking third and fourth globally. However, when focusing on where the related Patent Cooperation Treaty (PCT) applications originate, the U.S. is leading, followed by Europe and then China.

Blockchain technology patent claims can be patented in the United States, China and Japan within the framework of computer-implemented inventions, with no need for special guidelines except for those that are currently in place.

*Practice Tips:*

- Possible filing strategy – initial application with narrow claims, followed by continuation applications with broader claims.
- Courts have stricken broad claims using a preemption argument.
- Conduct examiner interviews to address § 101 rejections.
- Perform prior art searches to understand what might be non-conventional and to better plan for breadth of claims.
- Keep an application pending, new decisions keep coming out.
- Stay current with new decisions by the courts and the PTAB.