涉及商务方法的专利

Business Method Related Patents



PIERCE LAW

FRANKLIN PIERCE LAW CENTER

Franklin Pierce Law Center, Concord, New Hampshire, USA

涉及商务方法的专利
Business Method Related Patents

TRIPS Agreement Article 27.1

…patents shall be available for *any* inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. …Patents shall be available and patent rights enjoyable *without discrimination as to … the field of technology* ….

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TRIPS Agreement Article 27.1

凡属各类技术领域内的物品或方法发明，具备新颖性，进步性（发明性），及实用性者应给予专利保护。且权利范围不能因技术领域而有差异。

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U.S. Patent Code Section 100(b)

The term “process” means process, art or *method*, and includes a new use of a known process, machine, manufacture, composition of matter, or material.

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U.S. Patent Code Section 101 (35 U.S.C. 101)

"Whoever invents or discovers *any* new and useful process, machine, manufacture, or composition of matter, or *any* new and useful improvement thereof, may obtain a patent therefor, *subject to the conditions and requirements of this title*."

最高法院的判例解释
U.S. Supreme Court Precedents

What is patentable subject matter under Section 101?

Congress intended that Section 101 should include "*anything* under the sun that is made by man."

Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980)

最高法院的判例

U.S. Supreme Court Precedents

What is NOT patentable subject matter under Section 101?

The laws of nature, physical phenomena, and abstract ideas have been held not patentable. *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980) See *Parker v. Flook*, 437 U.S. 584 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972); *Funk Brothers Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948); *O'Reilly v. Morse*, 15 How. 62, 112-121 (1854)

最高法院的判例
U.S. Supreme Court Precedents

What is NOT patentable subject matter under Section 101?

"An idea of itself is not patentable. A principle, in the abstract, is a fundamental truth, an original cause, a motive; these cannot be patented, as no one can claim in either of them an exclusive right."

Diamond v. Diehr, 450 U.S. 175, 185 (1981)

地区法院的判解

U.S. District Court Application of Law

Paine, Webber v. Merrill Lynch, 564 F.Supp. 1358 (1983 United States District Court, Delaware)

"The Supreme Court … has clearly stated that a mathematical algorithmic formula is merely an idea and not patentable unless there is a new application of the idea to a new and useful end. See *Gottschalk v. Benson*, 409 U.S. 63, 93 S.Ct. 253, 34 L.Ed.2d 273 (1972)

地区法院的判解

U.S. District Court Application of Law

Paine, Webber v. Merrill Lynch, 564 F.Supp. 1358, 1366 (1983 United States District Court, Delaware)

"In mathematics, the word algorithm has attained the meaning of recursive computational procedure and appears in notational language, defining a computational course of events which is self contained, for example, A2 + B2 = C2. In contrast, the computer algorithm is a procedure consisting of operation to combine data, mathematical principles and equipment ***for the purpose of interpreting and/or acting*** upon a certain data input. In comparison to the mathematical algorithm, which is self-contained, the computer algorithm ***must be applied to the solution of a specific problem***."

地区法院的判解

U.S. District Court Application of Law

Paine, Webber v. Merrill Lynch, 564 F.Supp. 1358, 1366 (1983 United States District Court, Delaware)

The product of the claims of the '442 patent effectuates a highly useful business method and would be unpatentable if done by hand. [If] no *Benson* algorithm exists, the product of a computer program is irrelevant, and the focus of analysis should be on the operation of the program on the computer. ***The Court finds that the '442 patent claims statutory subject matter because the claims allegedly teach a method of operation on a computer to effectuate a business activity.*** Accordingly, the '442 patent passes the threshold requirement of Section 101.

地区法院的判解

U.S. District Court Application of Law

Paine, Webber v. Merrill Lynch, 564 F.Supp. 1358, 1366 fn8, (1983 United States District Court, Delaware)

"The Court [in finding that the '442 patent's data processing methodology for cash management account is patentable subject matter] is not deciding whether the patent in suit is invalid under any other provision of the patent laws of the United States."

美国专利局 1996 范例

1996 USPTO Guidelines

- “These three exclusions [law of nature, natural phenomena, abstract idea] recognize that subject matter that is not a *practical application or use* of an idea, a law of nature or a natural phenomenon is not patentable.” 118 Official Gazette 89

联邦巡回道法院判例

U.S. Ct. of Appeals (Federal Circuit)

State Street Bank and Trust Co. v. Signature Financial Group, Inc. 149 F. 3d 1368 (Fed. Cir. 1998), *cert. denied,* 119 S.Ct. 851 (1999).

- patent related to the management of mutual funds

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- means for a daily allocation of assets that are invested in a investment portfolio.

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联邦巡回道法院判例

U.S. Ct. of Appeals (Federal Circuit)

State Street Bank

Claim 1:

- 1. A data processing system for managing a financial services configuration of a portfolio established as a partnership, each partner being one of a plurality of funds, comprising:
  - (a) computer processor means [*a personal computer* including a CPU] for processing data;
  - (b) storage means [*a data disk*] for storing data on a storage medium;

联邦巡回道法院判例

U.S. Ct. of Appeals (Federal Circuit)

State Street Bank Claim 1:

- (c) first means [an arithmetic logic circuit configured to prepare the data disk to magnetically store selected data] for initializing the storage medium;
- (d) second means [an arithmetic logic circuit configured to retrieve information from a specific file, calculate incremental increases or decreases based on a specific input, allocate the results on a percentage basis, and store the output in a separate file] for processing data regarding assets in the portfolio and each of the funds from a previous day and data regarding increases or decreases in each of the funds, [sic, funds'] assets and for allocating the percentage share that each fund holds in the portfolio;

联邦巡回道法院判例

U.S. Ct. of Appeals (Federal Circuit)

State Street Bank

Claim 1:

- (e) third means [an arithmetic logic circuit…] for processing data regarding daily incremental income, expenses, and net realized gain or loss for the portfolio and for allocating such data among each fund;
- (f) fourth means [an arithmetic logic circuit …] for processing data regarding daily net unrealized gain or loss for the portfolio and for allocating such data among each fund; and
- (g) fifth means [an arithmetic logic circuit …] for processing data regarding aggregate year-end income, expenses, and capital gain or loss for the portfolio and each of the funds

联邦巡回道法院判例

U.S. Ct. of Appeals (Federal Circuit)

State Street Bank

- The claimed invention is “a machine.”
- Neither a mathematical algorithm nor an abstract idea is patentable subject matter, unless (1) it produces a useful, concrete and tangible result, (2) it is applied in a useful way or (3) it is reduced to a practical application

联邦巡回道法院判例

U.S. Ct. of Appeals (Federal Circuit)

State Street at 1373

"We hold that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces "a useful, concrete and tangible result"– a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades."

联邦巡回道法院判例

U.S. Ct. of Appeals (Federal Circuit)

State Street at 1375

"“claim 1 is directed to a machine programmed with … software and admittedly produces a ‘useful, concrete, and tangible result’ …. This renders it statutory subject matter, even if the useful result is expressed in numbers, such as price, profit, percentage, cost, or loss.”

联邦巡回道法院判例

U.S. Ct. of Appeals (Federal Circuit)

State Street at 1375

"since the 1952 Patent Act, business methods have been, and should have been, subject to the same legal requirements for patentability as applied to any other process or method."

联邦巡回道法院判例

U.S. Ct. of Appeals (Federal Circuit)

- *AT&T v. Excel Communications,* 50 USPQ2d 1447 (Fed. Cir. 1999), cert. denied, 120 S.Ct. 368 (1999)

联邦巡回道法院判例

U.S. Ct. of Appeals (Federal Circuit)

- *AT&T* 1. A … method comprising the steps of:
- (a) generating a message record for an interexchange call between an originating subscriber and a terminating subscriber, and
- (b) including, in said message record, a primary interexchange carrier (PIC) indicator having a value which is a function of whether or not the interexchange carrier associated with said terminating subscriber is a predetermined one of said interexchange carriers.

联邦巡回道法院判例

U.S. Ct. of Appeals (Federal Circuit)

- *AT&T* 1. A method for use in a telecommunications system in which interexchange calls initiated by each subscriber are automatically routed over the facilities of a particular one of a plurality of interexchange carriers associated with that subscriber, said method comprising the steps of:
- (a) generating a message record for an interexchange call between an originating subscriber and a terminating subscriber, and
- (b) including, in said message record, a primary interexchange carrier (PIC) indicator having a value which is a function of whether or not the interexchange carrier associated with said terminating subscriber is a predetermined one of said

联邦巡回道法院判例
U.S. Ct. of Appeals (Federal Circuit)

- *AT&T v. Excel Communications,* 50 USPQ2d 1447, at1452 (Fed. Cir. 1999), cert. denied, 120 S.Ct. 368 (1999)

- “ (t)he PIC indicator represents information about the call recipient’s PIC, a useful, non-abstract result that facilitates differential billing of long-distance calls made by an IXC’s subscriber.”

Amazon v. Barnes & Noble

- 1. A method of placing an order for an item comprising:
  - under control of a client system, displaying information identifying the item; and in response to only a single action being performed,
  - sending a request to order the item along with an identifier of a purchaser of the item to a server system;
  - under control of a single-action ordering component of the server system, receiving the request;
  - retrieving additional information previously stored for the purchaser identified by the identifier in the received request; and
  - generating an order to purchase the requested item for the purchaser identified by the identifier in the received request using the retrieved additional information; and
  - fulfilling the generated order to complete purchase of the item whereby the item is ordered without using a shopping cart ordering model.

Amazon v. Barnes & Noble

- Statutory Subject Matter? 专利内容?
  YES 是
- Novel? 新颖性？
- Inventive step? 发明性？

Defense to Infringement "Prior User Rights"

- 35 U.S.C. Section 273(b)
- "It shall be a defense to an action for infringement with respect to any subject matter that would otherwise infringe one or more claims for a method [of doing or conducting business] against a person, if such person had, acting *in good faith*, actually *reduced the subject matter to practice* and
- it at least one year before the effective filing date."

European Patent Convention Art. 52

- (1) European patents shall be granted for any inventions, in all fields of technology, provided that they are new, involve an inventive step and are susceptible of industrial application.
- (2) The following in particular shall not be regarded as inventions within the meaning of paragraph 1:
  - (a) discoveries, scientific theories and mathematical methods;
  - (b) aesthetic creations;
  - (c) schemes, rules and ***methods for*** performing mental acts, playing games or doing ***business, and programs for computers;***
  - (d) presentations of information.
- (3) Paragraph 2 shall exclude the patentability of the subject-matter or activities referred to therein only to the extent to which [it] relates to such subject matter or activities ***as such.***

European Patent Law

- T 931/95 *Pension Benefit Systems Partnership*. EPO Appeal Board
- Disapproved a passage in the Guidelines for Examination in the EPO requiring the examiner to "disregard the form or kind of claim and concentrate on the real contribution which the subject matter claimed adds to the known art" (so-called "contribution approach.")
- HELD that "as a matter of principle no claim to apparatus could fall within a prohibition on the patenting of business

European Patent Law

- T 931/95 Pension Benefit Systems Partnership. EPO Appeal Board
- Inventive Step
- Improvement in an excluded field (business methods) cannot contribute to inventive step of an apparatus.