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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WIN CODY, MARK KLEIN, and JAMES MARX

Appeal 2017-010543[1]
Application 12/322,826
Technology Center 3600

Before MURRIEL E. CRAWFORD, MICHAEL W. KIM, and PHILIP J. HOFFMANN, *Administrative Patent Judges*.

KIM, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

This is an appeal from the final rejection of claims 5–16 and 18. We have jurisdiction to review the case under 35 U.S.C. §§ 134 and 6.

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[1] The Appellants identify Professional Capital Services, LLC as the real party in interest. Appeal Br. 1.

The invention relates generally to systems and methods for managing investments, particularly in Exchange Traded Fund (ETF) 401(k) retirement plans. Spec. ¶ 1.[2]

Claim 5, the only independent claim pending, is illustrative:

> 5. A computer-based method for managing an investment plan including Exchange Traded Funds (ETFs) comprising:
>
> gathering daily plan participant buy/sell orders for ETF trades and mutual fund trades from a storage medium of a recordkeeping system of a third party administrator and systems associated with a plan participant's website and storing the orders in a trade order file before market close;
>
> filtering the trade order file using a computer processor of the record keeping system to separate the ETF trades from the mutual fund trades in the buy/sell orders, whereby the mutual fund trades are routed to trade link processes;
>
> maintaining a breakage account in the investment plan wherein the breakage account holds market positions and cash on behalf of the investment plan for completing the ETF trades in whole share values;
>
> calculating from the ETF trades the net ETF share buy or sell per ETF fund held in the investment plan whereby the net ETF share buy or sell trade with a fractional unit per ETF fund held in the investment plan are rounded up to whole ETF share sell or dollar-certain ETF buy and storing the results in the trade order file;
>
> calculating a fractional needed share worth necessary to round the net ETF share sell up to the whole ETF share sell or the net ETF share buy up to the dollar-certain ETF buy and storing the results in the breakage account file;
>
> settling all trade orders in the trade order file at market close for plan participants,

[2] We shall refer to the paragraph numbers in the original Specification, filed Feb. 5, 2009 (hereinafter "Spec.").

(i) whereby the fractional needed share worth in the case of a dollar-certain ETF buy is transferred from the breakage account of the investment plan into a plan participant account;
(ii) whereby, if the breakage account has more than or the same as the fractional needed share, then the fractional needed share worth in the case of the whole ETF share sale is sold from the breakage account of the plan along with the net ETF share sell from plan participant accounts; and
(iii) whereby, if the breakage account has less than the fractional needed share worth in the case of a whole ETF share sale, then the fractional unit of the net ETF share sell is purchased by the breakage account of the investment plan;
and
wherein results of buy/sell orders in the trade order file and in the breakage account file are stored in the storage medium.

The Examiner rejected claims 5–16 and 18 under 35 U.S.C. § 101 as directed to ineligible matter in the form of an abstract idea.

We AFFIRM.

ANALYSIS

Principles of Law

An invention is patent-eligible if it claims a "new and useful process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. The Supreme Court, however, has long interpreted § 101 to include implicit exceptions: "[l]aws of nature, natural phenomena, and abstract ideas" are not patentable. *E.g.*, *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014).

In determining whether a claim falls within the excluded category of abstract ideas, we are guided in our analysis by the Supreme Court's two-

step framework, described in *Mayo* and *Alice*. *Id.* at 2355 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012)). In accordance with that framework, we first determine whether the claim is "directed to" a patent-ineligible abstract idea. *See Alice*, 134 S. Ct. at 2356 ("On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk."); *Bilski v. Kappos*, 561 U.S. 593, 611 (2010) ("Claims 1 and 4 in petitioners' application explain the basic concept of hedging, or protecting against risk."); *Diamond v. Diehr*, 450 U.S. 175, 184 (1981) ("Analyzing respondents' claims according to the above statements from our cases, we think that a physical and chemical process for molding precision synthetic rubber products falls within the § 101 categories of possibly patentable subject matter."); *Parker v. Flook*, 437 U.S. 584, 594–595 (1978) ("Respondent's application simply provides a new and presumably better method for calculating alarm limit values."); *Gottschalk v. Benson*, 409 U.S. 63, 64 (1972) ("They claimed a method for converting binary-coded decimal (BCD) numerals into pure binary numerals.").

The following method is then used to determine whether what the claim is "directed to" is an abstract idea:

> [T]he decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided. *See, e.g.*, *Elec. Power Grp.*, 830 F.3d at 1353–54. That is the classic common law methodology for creating law when a single governing definitional context is not available. *See generally* Karl N. Llewellyn, The Common Law Tradition: Deciding Appeals (1960). This more flexible approach is also the approach employed by the Supreme Court. *See Alice*, 134 S. Ct. at 2355–57. We shall follow that approach here.

Amdocs (Israel) Ltd. v. Openet Telecom, Inc., 841 F.3d 1288, 1294 (Fed. Cir. 2016).

The patent-ineligible end of the spectrum includes fundamental economic practices, *Alice*, 134 S. Ct. at 2357; *Bilski*, 561 U.S. at 611; mathematical formulas, *Flook*, 437 U.S. at 594–95; and basic tools of scientific and technological work, *Benson*, 409 U.S. at 69. On the patent-eligible side of the spectrum are physical and chemical processes, such as curing rubber, *Diamond*, 450 U.S. at 182 n.7, "tanning, dyeing, making waterproof cloth, vulcanizing India rubber, smelting ores," and a process for manufacturing flour, *Benson*, 409 U.S. at 67.

If the claim is "directed to" a patent-ineligible abstract idea, we then consider the elements of the claim—both individually and as an ordered combination—to assess whether the additional elements transform the nature of the claim into a patent-eligible application of the abstract idea. *Alice*, 134 S. Ct. at 2355. This is a search for an "inventive concept"—an element or combination of elements sufficient to ensure that the claim amounts to "significantly more" than the abstract idea itself. *Id.*

The Appellants acknowledge independent claim 5 is directed to an abstract idea, but argue that the claim recites eligible subject matter because, according to the Appellants, the steps of the claim permit exchange of cash for fractional shares of exchange-traded funds, which are manipulations of tangible assets, thus yielding an "improved technological process." Appeal Br. 7–8. The Appellants assert that the claim involves three types of tangible assets: the cash and share values in the investor's account that "represents real, tangible assets," the shares of a company's stock that "represent that real, tangible assets of the company," and value in the

claimed breakage account "which holds ETF shares and/or cash of the investment plan manager." Reply Br. 1–2.

The problem with the Appellants' arguments is that none of the cited items are tangible. "Value," even if measured in units of currency, is a concept useful and intelligible only in the human mind, as is the money in which it is measured. Stocks similarly represent the theoretical concept of fractional ownership of a legal entity known as a corporation. The breakage account, like any account, is merely a record of values. That the claims keep track of fractional shares of ownership and account for them internally, without needing to trade fractional share in a market that does not permit fractional share trading, does not manipulate anything tangible. By the Appellants' own argument, these values, stocks, and accounts are merely *representations*, and representations are only useful and intelligible in the human mind.

The Appellants have not shown error in the Examiner's rejection of claim 5. For this reason, we sustain the rejection of claims 5–16 and 18 under 35 U.S.C. § 101, because the Appellants state that dependent claims 6–16 and 18 stand or fall with claim 5. Appeal Br. 3.

DECISION

We AFFIRM the rejection of claims 5–16 and 18 under 35 U.S.C. § 101.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED