



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
15/468,839 03/24/2017 Thomas G. Davis Tom Davis-P0002 9668

133690 7590 01/30/2019
Goodhue, Coleman & Owens, P.C.
12951 University Ave
Suite 201
Clive, IA 50325

Table with 1 column: EXAMINER

DALBO, MICHAEL J

Table with 2 columns: ART UNIT, PAPER NUMBER

2865

Table with 2 columns: NOTIFICATION DATE, DELIVERY MODE

01/30/2019

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@goodhue.com
officeaction@apcoll.com
USPTO@dockettrak.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL
AND APPEAL BOARD

Ex parte THOMAS G. DAVIS¹

Appeal 2018-009155
Application 15/468,839
Technology Center 2800

Before BEVERLY A. FRANKLIN, CHRISTOPHER C. KENNEDY, and
BRIAN D. RANGE, *Administrative Patent Judges*.

FRANKLIN, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ Appellant identifies the real party in interest as Thomas G. Davis. Appeal Brief, 4.

Appellants request our review under 35 U.S.C. § 134(a) of the Examiner's decision rejecting claims 1–16. We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

STATEMENT OF THE CASE

Claim 1 is illustrative of Appellant's subject matter on appeal and is set forth below:

Claim 1 : A method of collecting and sharing envelope efficiency of a building structure on a comparative basis, the method comprising:

collecting HVAC equipment state information from HVAC equipment associated with the building structure;

collecting information about the building structure including the square footage of conditioned space within the building;

associating indoor temperature data and outdoor temperature data with the HVAC equipment state information;

determining using a processor, heat loss for the building structure using the indoor temperature data, the outdoor temperature data, and the HVAC equipment state information;

determining using the processor, the envelope efficiency for the building structure using the heat loss and the square footage of the conditioned spaced within the building;

displaying envelope efficiency for the building structure in comparison to a plurality of other building structures to show the envelope efficiency for the building structure on the comparative basis.

The Examiner relies on the following prior art references as evidence of unpatentability:

Roy	US 2015/0261229	Sept. 17, 2015
Arensmeier et al. hereinafter “Arensmeier”	US 2014/0266755	Sept. 18, 2014
Steinberg et al. hereinafter “Steinberg”	US 2010/0070234	Mar. 18, 2010
Gilbert Zou et al. hereinafter “Zou”	US 2014/0379298 US 2011/0031322	Dec. 25, 2014 Feb. 10, 2011
Fadell et al. hereinafter “Fadell”	US 2013/0204440	Aug. 8, 2013
Carlin et al. hereinafter “Carlin”	US 2013/0275263	Oct. 17, 2013
Koop Davis	US 9,443,043 B1 US 7,072,727 B1	Sept. 13, 2016 Jul. 4, 2006

THE REJECTIONS

1. Claims 1–16 are rejected under 35 U.S.C. §101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. (*See* Final Office Action, 2–9.)

2. Claims 1, 2, and 10 are rejected under 35 USC §103 over Roy in view of Arensmeier (*see* Brief pages 33-44; Final Office Action, 9–14)).
3. Claims 3 and 4 are rejected under 35 USC §103 over Roy in view of Arensmeier (*see* Brief page 44; Final Office Action, 14).
4. Claims 5 and 6 are rejected under 35 USC §103 over Roy in view of Arensmeier and Steinberg (*see* Brief pages 44-45; Final Office Action 15–18).
5. Claims 7 and 15 are rejected under 35 USC §103 over Roy in view of Arensmeier and Gilbert. (*See* Final Office Action, 18–23)
6. Claims 8 and 16 are rejected under 35 USC §103 over Roy in view of Arensmeier and Zou. (*See* Final Office Action, 23–27)
7. Claim 9 is rejected under 35 USC §103 over Roy in view of Arensmeier and Fadell (*see* Brief page 68)).
8. Claim 11 is rejected under 35 USC §103 over Roy in view of Arensmeier and Carlin (*See* Final Office Action, 28)).
9. Claims 12 and 13 are rejected under 35 USC §103 over Roy in view of Arensmeier and Koop. (*See* Final Office Action, 29–30)

10. Claim 14 is rejected under 35 USC §103 under 35 USC §103 over Roy in view of Arensmeier and Davis (*See* Final Office Action, 31).

ANALYSIS

For purposes of this appeal, we address separately argued claims, and the remaining claims stand or fall with the argued claims, consistent with 37 C.F.R. § 41.37(c)(1)(iv). We thus consider claims 1, 15, and 16.

Upon consideration of the evidence and each of the respective positions set forth in the record, we find that with regard to the rejection under 35 U.S.C. §101, we agree with the Examiner's conclusion that claims 1–16 are patent ineligible for the reasons discussed hereafter. With regard to the prior art rejections, we agree with the Examiner's stated position in the record and adopt it as our own.

Accordingly, we sustain each of the Examiner's rejections on appeal and affirm.

Rejection 1

The PTO published revised guidance on the application of § 101. *See* USPTO's January 7, 2019 Memorandum, *2019 Revised Patent Subject Matter Eligibility Guidance* ("Memorandum"). Under that guidance, our analysis follows. We first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human interactions such as a fundamental economic practice, or mental processes); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

- (3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or
- (4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See Memorandum.

Claim 1 is directed to method steps directed to mental processes (observation, e.g., collecting HVAC equipment state information) and mathematical relationships (e.g., determining heat loss using a processor). As such, claim 1 recites a judicial exception, and we then discern whether claim 1 recites additional elements that integrate the judicial exception into a practical application using one or more of the considerations laid out by the courts. We conclude that the claim does not integrate the judicial exception into a practical application, and within this context, we agree with the Examiner’s application of certain case law discussed in the record by the Examiner as applicable herein. *See, e.g.*, Ans. 3–8. Finally, we agree with the Examiner’s finding that the claim elements “are well-understood,

routine, and conventional in the art.” *Id.* at 8; Final Act. 4. Although the Appellant argues, e.g., (1) that “collecting HVAC equipment state information” and “associating indoor temperature data and outdoor temperature data with the HVAC equipment state information” are unconventional steps, App. Br. 20–21, and (2) that “an outside temperature sensor” and “a sensor for determining cycling on and off HVAC equipment” are “unconventional limitations,” *id.* at 26–27, a preponderance of the evidence supports the Examiner’s determination that they are not, *see* Ans. 8 (citing evidence), 10 (citing evidence), 14 (citing evidence), 20 (citing evidence). As such, we agree with the Examiner’s conclusion that claim 1 is patent ineligible.

With regard to claim 15, claim 15 is directed to a system that includes a sensor for determining cycling on and off of the HVAC equipment, as well as other elements having similar language as that recited in claim 1. To the extent the claim 15 is similar to claim 1, we make the same determinations as made with claim 1, discussed, *supra*. With regard to the additional element of use of a sensor recited in claim 15, such an element likewise does not integrate the abstract idea into a practical application, and therefore claim 15 is patent ineligible.

With regard to claim 16, claim 16 is a method claim similar to method claim 1 but specifies use of a microphone that collects audio of the HVAC equipment. In a similar manner as discussed with regard to the sensor recited in claim 15, use of a microphone likewise does not integrate the abstract idea into a practical application, and therefore claim 16 is patent ineligible.

In view of the above, we agree with the Examiner's conclusion that claims 1–16 are patent ineligible under 35 U.S.C. §101.

Rejections 2–10

We note that Appellants do not separately argue the claims that depend upon claim 1. Claims 2–14 either directly or indirectly depend upon claim 1. These claims thus stand or fall with claim 1. 37 C.F.R. § 41.37(c)(1)(iv).

We are unpersuaded by Appellants' arguments regarding the rejection of claim 1 for the reasons provided by the Examiner in the record, particularly as stated in the Examiner's reply to argument beginning on page 20 of the Answer, which we incorporate as our own. We thus affirm Rejections 2–10 for the reasons provided by the Examiner therein.

We note that independent claims 15 and 16 are rejected in Rejections 5 and 6, respectively. Appellants' argument regarding the combination of Roy in view of Arensmeier remain unpersuasive for the same reasons relied upon involving the rejection of claim 1.² We thus affirm the rejection of claims 15 and 16.

DECISION

Each rejection is affirmed.

TIME PERIOD

² The Examiner relies upon Gilbert for teaching the aspect of claim 15 pertaining to use of the sensor. Final Act. 22. The Examiner relies upon Zou for teaching the aspect of claim 16 pertaining to use of a microphone. Final Act. 26. We agree with the Examiner's factual findings and position as stated in the record.

Appeal 2018-009155
Application 15/468,839

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

ORDER
AFFIRMED