



# 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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
12/861,862	08/24/2010	Isaac I. Bejar	011948-0158-999	2862
20583	7590	03/27/2018	EXAMINER	
Jones Day 250 Vesey Street New York, NY 10281-1047			HULL, JAMES B	
			ART UNIT	PAPER NUMBER
			3715	
			MAIL DATE	DELIVERY MODE
			03/27/2018	PAPER

**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.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* ISAAC I. BEJAR and EDITH AURORA GRAF

---

Appeal 2017-000953  
Application 12/861,862  
Technology Center 3700

---

Before MICHAEL L. HOELTER, THOMAS F. SMEGAL, and  
JEFFREY A. STEPHENS, *Administrative Patent Judges*.

STEPHENS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants<sup>1</sup> seek our review under 35 U.S.C. § 134(a) from the Examiner's Final Office Action ("Final Act.") rejecting claims 1–60, as supplemented by the Advisory Action (dated Feb. 24, 2016). We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

---

<sup>1</sup> The real party in interest is identified as Educational Testing Service. Br. 3.

*Claimed Subject Matter*

The claimed subject matter “relates generally to test generation and more specifically to generation of adaptive tests.” Spec. para. 1. Claims 1, 18, and 35 are independent. Claim 1, reproduced below, illustrates the claimed subject matter.

1. A computer-implemented method of assigning an examinee to one of a plurality of scoring levels based on an adaptive exam that generates one or more questions of the exam subsequent to the start of administration of the exam to the examinee in a computer-based assessment, the method comprising:

providing a first test to the examinee, the first test including a request for a free-form constructed response including a written phrase, a spoken phrase, a sentence, a paragraph, or a mathematical expression, the first test being based on a first form model that provides a blueprint for the first test, the first form model including a plurality of item models;

receiving a first response from the examinee, wherein the first response includes the constructed response requested by the first test;

generating a first score for the first response and assigning the examinee to a first scoring level based on the first score;

generating a second test subsequent to receiving the first response, wherein a difficulty of the second test is based on the first score for the first response, the second test being based on a second form model that provides a blueprint for the second test, the second form model being different from the first form model;

providing the second test to the examinee;

receiving a second response from the examinee;

generating a second score for the second response;

assigning the examinee to a second scoring level based on the second score, the second scoring level further classifying the examinee within the first scoring level;

generating a third test subsequent to receiving the second response, wherein the third test requests a constructed response from the examinee and a difficulty of the third test is based on

i) the first score relative to a first threshold, and ii) the second score relative to a second threshold, and wherein the third test is based on a third form model that provides a blueprint for the third test, the third form model being different from the first form model and the second form model;

wherein generating the third test comprises:

determining an optimum third cutscore threshold based on a predetermined standard error of measurement;

accessing an information function associated with a model template;

automatically generating the third test by selecting values for a plurality of variables identified in the model template based on the information function and the optimum third cutscore;

automatically generating a third test constructed response scoring model data structure based on the automatically generated third test, wherein the scoring model data structure includes a plurality of concept data records, each concept data record identifying a concept expected in a response to the third test, wherein the concept data records include an equivalence identifier that indicates which of the concepts are equivalent alternatives to each other;

providing the third test to the examinee;

receiving a third response from the examinee; and

generating a third score for the third response based on the scoring model data structure, the third score further classifying the examinee within the second scoring level.

### *Rejection<sup>2</sup>*

I. Claims 1–60 stand rejected under 35 U.S.C. § 101 as being directed to non-patent-eligible subject matter. Final Act. 3–4.

---

<sup>2</sup> In the Advisory Action, the Examiner withdraws the rejections of claims under 35 U.S.C. § 112, first paragraph.

## DISCUSSION

We have reviewed the Final Action, the Advisory Action, the Appeal Brief, and the Examiner's Answer.<sup>3</sup> We agree with and adopt the findings and conclusions of the Examiner in the Final Action (pp. 3–4, 6), Advisory Action (p. 2), and Answer (pp. 2–7). Appellants have not informed us of error in the Examiner's determination that the claims are directed to an abstract idea and do not include significantly more than the abstract idea. We highlight the following primarily for emphasis.

Appellants' arguments incorrectly suggest that the lack of a rejection of the claims as anticipated or obvious renders the rejection under § 101 improper. *See, e.g.*, Br. 11 (“[A]lthough the general field of adaptive testing may be long-prevalent, the claimed specific sequence of steps has never been practiced. This is evidenced by the Examiner having found this claimed sequence of steps to be novel and non-obvious over the prior art.”); *id.* (“[T]he claimed sequence of processor-performed sequence of steps are not an abstract idea but instead constitute (what Alice refers to as) an ‘improvement’ of the technology, by using a processor to perform something novel and non-obvious.”). “The Supreme Court has . . . consistently held that § 101 provides a basis for a patentability/validity determination that is independent of—and on an equal footing with—any other statutory patentability provision.” *BASCOM Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1347 (Fed. Cir. 2016).

Appellants also argue “the claimed processor-performed steps are not mimicking any human function, but instead performing a non-obvious sequence of steps (for iteratively generating test questions and scoring

---

<sup>3</sup> Appellants did not file a reply brief.

answers) that no human has ever implemented.” Br. 12. Appellants contrast claims covering interaction between humans with “the claimed sequence of steps . . . performed only by a processor, with the human examinee simply answering questions as he/she normally would.” *Id.* “[W]hile the patent may in fact require that the claimed data relate to ‘transactions or activities that are executed in the computer environment,’ limiting the claims to the computer field does not alone transform them into a patent-eligible application.” *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097 (Fed. Cir. 2016). We agree with the Examiner that “a teacher could carry out the process of providing a first test, receiving a first response, generating scores, and generating next test based on the score of the previous test, in the reiterative [process] recited in claims 1–60.” Ans. 6; *see also* Ans. 7 (“Although Applicant argues that a teacher does not have access to the paper test during administration, the claimed invention does not have time-based restrictions, and thus could be performed over time with periodic breaks while a response is scored and the next test is generated . . .”). “Using a computer to accelerate an ineligible mental process does not make that process patent-eligible.” *Bancorp Servs. L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1279 (Fed. Cir. 2012).

Appellants’ arguments based on *DDR Holdings, LLC v. Hotels.Com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014), are similarly unavailing. In explaining why “Claim 1 is clearly directed to a problem in the computer realm” as in *DDR Holdings*, Appellants emphasize the claim’s recitation of a “computer-based assessment,” the computer architecture involved, and that the “generated assessment task is generated during administration of the test on which that task appears (i.e., the assessment task is generated ‘on-the-fly’).”

Br. 13. Appellants contend claim 1 is “more technical” than claim 13 in *DDR Holdings*, “which recites only a data store, a computer processor, and a web page without any corresponding data structures.” *Id.*

Appellants’ arguments incorrectly focus on the amount of computer structure recited in the claim or whether a computer is necessary to perform the method of claim 1. Although computers are used, Appellants do not explain how “the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks” or a similar computer environment. *DDR Holdings*, 773 F.3d at 1257. In reviewing claim 1, it is evident that the computer is used as a tool for generating the iterative tests and generating scores based on responses. Even if claim 1 required a test creator “to create large numbers of test items on the fly during administration of examinations,” and it would not be possible for a human test creator to do so, Br. 14, the underlying method of claim 1 arises from the idea of generating subsequent tests based on form models and the score on previous responses, and iteratively assigning a scoring level based on the responses. Although a computing environment may be the most practical environment for the underlying idea, it does not change the abstract nature of the method claimed.

Accordingly, for the reasons discussed above and by the Examiner, we are not informed of error in the Examiner’s rejection of claims 1–60 under 35 U.S.C. § 101, and we sustain the rejection.

Appeal 2017-000953  
Application 12/861,862

DECISION

We affirm the Examiner's rejection of claims 1–60.

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).

AFFIRMED