

NOTE: This disposition is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

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**IN RE: GEORGE MIZHEN WANG,**  
*Appellant*

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2017-1827

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Appeal from the United States Patent and Trademark  
Office, Patent Trial and Appeal Board in No. 13/219,680.

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Decided: June 20, 2018

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GEORGE MIZHEN WANG, Fremont, CA, pro se.

NATHAN K. KELLEY, Office of the Solicitor, United  
States Patent and Trademark Office, Alexandria, VA, for  
appellee Andrei Iancu. Also represented by MAI-TRANG  
DUC DANG, BENJAMIN T. HICKMAN, THOMAS W. KRAUSE.

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Before REYNA, SCHALL, and STOLL, *Circuit Judges*.

PER CURIAM.

George Mizhen Wang appeals the final decision of the  
Patent Trial and Appeal Board (“Board”) that affirmed  
the Examiner’s final rejection of claims 1–17, 19, 21, and  
22 of U.S. Patent Application No. 13/219,680 (“the ’680  
application”). *Ex Parte Wang*, No. 2016-000264, 2017 WL

383025, at \*1 (Jan. 23, 2017) (“*Board Decision*”). Relevant to this appeal, the Examiner rejected claims 1–17, 19, 21, and 22 (“the application claims on appeal”) after finding (1) that all of the claims were directed to non-statutory subject matter under 35 U.S.C. § 101; (2) that all of the claims were indefinite; (3) that independent claims 1, 2, and 19 and dependent claims 3–5 and 14 were anticipated by U.S. Patent No. 7,004,758 B2 to Kuoju Su (“Su”), Appx.154; and (4) that dependent claims 6–13, 15–17, 21, and 22 were obvious over Su in view of the Scholastic First Dictionary, Appx. 160. *See* Appx. 86.

We have jurisdiction pursuant to 35 U.S.C. § 141 and 28 U.S.C § 1295(a)(4)(A). Because, as explained below, we agree with the Board that the application claims on appeal are directed to non-statutory subject matter, we *affirm* the Board’s decision. We do not reach the remaining issues decided by the Board.

## DISCUSSION

### I.

The invention claimed in the ’680 application relates to “[a] phonetic symbol system formed by phonetic symbols using letters of [the] English alphabet.” ’680 application, Abstract, Appx. 18. The specification distinguishes the claimed invention from existing phonetic symbol systems that use diacritic marks and symbols that are not letters. *Id.*, Appx. 19. Embodiments described in the ’680 application map letters to sounds. *Id.*, Appx. 21–30. For example, “a” represents the “a” sound in “about,” while “e” represents the “e” sound in “bed” and “aa” the “a” sound in “father.” *Id.*, Appx. 21. Claim 1 is illustrative of the claimed invention. It reads as follows:

A phonetic symbol system comprising:

a plurality of phonetic symbols, wherein each of said phonetic symbols is defined by one or more than one letter of English al-

phabet, the case or the style of said letter does not affect the sounds of said phonetic symbols, there are vowel phonetic symbols and consonant phonetic symbols of said phonetic symbols, each vowel is distinctively represented by one of said vowel phonetic symbols, and each consonant is distinctively represented by one of said consonant phonetic symbols.

Appx. 11.

## II.

Section 101 provides, in relevant part, that “[w]hoever 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.” The Examiner rejected the application claims on appeal after determining that the phonetic symbols that are the subject of the ’680 application “do not have any independent physical existence as distinct entities of an apparatus/system and therefore, when considered independently, are not considered to fall within one of the four statutory categories of invention.” Appx. 90. In affirming the final rejection, the Board agreed with the Examiner that “defining phonetic symbols in language, using strings of English letters,” is an unpatentable abstract idea. *Board Decision* at \*2–3.

## III.

Whether an invention recites patent-eligible subject matter under section 101 is a pure question of law that we review de novo. *Genetic Techs. Ltd. v. Merial LLC.*, 818 F.3d 1369, 1373 (Fed. Cir. 2016). Applying that standard here, we discern no error in the Board’s decision.

Addressing section 101’s patentability requirements, we have stated that “[f]or all categories except process claims, the eligible subject matter must exist in some

physical or tangible form.” *Digitech Image Techs., LLC v. Elecs. For Imaging, Inc.*, 758 F.3d 1344, 1348 (Fed. Cir. 2014). That means that to qualify as a machine under section 101, the claimed invention must be a “concrete thing, consisting of parts, or of certain devices and combination of devices.” *Id.* at 1349 (quoting *Burr v. Duryee*, 68 U.S. 531, 570 (1863)). At the same time, “[t]o qualify as a manufacture, the invention must be a tangible article that is given a new form, quality, property, or combination through man-made or artificial means.” *Id.* (citing *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980)). Lastly, “a composition of matter requires the combination of two or more substances and includes all composite articles.” *Id.* Because the phonetic symbol system that is the subject of Mr. Wang’s claimed invention is not a “concrete thing,” a “tangible article,” or “a combination of two or more substances,” it plainly does not meet the “physical or tangible form” requirement of section 101.

Neither does the claimed invention qualify as a process under section 101. A process is any “process, art or method” that “includes a new use of a known process, machine, composition of matter, or material.” 35 U.S.C. § 100(b). A process can be “an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing.” *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972) (quoting *Cochrane v. Deener*, 94 U.S. 780, 787–88 (1876)). A process “consists of a series of acts or steps” and is something that “has to be carried out or performed.” *In re Nuijten*, 500 F.3d 1346, 1355 (Fed. Cir. 2007) (quoting *In re Kollar*, 286 F.3d 1326, 1332 (Fed. Cir. 2002)). As seen, Mr. Wang claims “[a] phonetic symbol system comprising a plurality of phonetic symbols, wherein each of said phonetic symbols is defined by one or more than one letter of English alphabet.” Appx. 11. Significantly, none of the application claims on appeal requires an act or step or anything that must be performed. The only activity recited in the independent

claims of the '680 application are things “being defined,” things “not affect[ing]” other things, and things “represent[ing]” other things. Appx. 11, 14–15. Mr. Wang’s invention thus does not qualify as a patent-eligible process under section 101.

Finally, where, as here, claims of a patent application recite an abstract idea, the question becomes whether they contain “additional features” that embody an “inventive concept,” so as to nevertheless make them patent-eligible. *Alice Corp. Pty. Ltd v. CLS Bank Int’l*, 134 S. Ct. 2347, 2357 (2014) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294, 1297 (2012)). The application claims on appeal, however, contain no “additional features” of any kind embodying an inventive concept. The claims merely encompass strings of English letters representing sounds. In short, there is no inventive concept that rescues them from patent ineligibility.

#### CONCLUSION

For the foregoing reasons the decision of the Board is affirmed.

#### AFFIRMED

No costs.