

APPENDIX

APPENDIX A Federal Circuit Opinion

NOTE: This disposition is nonprecedential.

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

IN RE: GEORGE MIZHEN WANG,

Appellant

2017-1827

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

Decided: June 20, 2018

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.

Before REYNA, SCHALL, and STOLL, Circuit Judges.

PER CURLAM.

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 alphabet, 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.

**APPENDIX B Patent Trial and Appeal Board
Decision**

UNITED STATES PATENT AND
TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND
APPEAL BOARD

Ex parte GEORGE MIZHEN WANG
and LILINI WANG

Appeal 2016-000264
Application 13/219,680¹
Technology Center 2600

Before JOHN A. EVANS, NATHAN A. ENGELS,
and SCOTT E. BAIN, Administrative Patent Judges.
BAIN, Administrative Patent Judge.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from
the Examiner's Final Rejection of claims 1—17, 19, 21,

and 22, which constitute all claims pending in the application. Claims 18 and 20 have been cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ The pro se Appeal Brief omits the real party in interest.

STATEMENT OF THE CASE

The Claimed Invention

The claimed invention relates to a “phonetic symbol system” using “letters of [the] English Alphabet.” Abstract. Claims 1, 2, and 19 are independent. Claim 1 is illustrative of the invention and the subject matter of the appeal, and reads as follows:

1. 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, 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.

Br. 21 (Claims App.).

The Rejections on Appeal

Claims 1-17, 19, 21, and 22 stand rejected under pre-AIA 35 U.S.C. § 112, first paragraph, as failing to enable one of ordinary skill in the art to make and use the invention. Final Act. 5.

Claims 1-17, 19, 21, and 22 stand rejected under pre-AIA 35 U.S.C. § 112, second paragraph, as

indefinite. Final Act. 6.

Claims 1-17, 19, 21, and 22 stand rejected under pre-AIA 35 U.S.C. § 101 as directed to non-statutory subject matter. Final Act. 6-7.

Claims 1-5, 14, and 19 stand rejected under pre-AIA 35 U.S.C. § 102(b) as anticipated by Su (US 7,004,758 B2; Feb. 28, 2006). Final Act. 7-9.

Claims 6-13, 15-17, 21, and 22 stand rejected under pre-AIA 35 U.S.C. § 103(a) as unpatentable over Su and Scholastic First Dictionary (Scholastic Inc., 1998). Final Act. 9-11.

ANALYSIS

We have reviewed the Examiner's rejections in light of Appellants' arguments presented in this appeal. Arguments which Appellants could have made but did not make in the Brief are deemed to be waived. See 37 C.F.R. § 41.37(c)(1)(iv). On the record before us, we are persuaded the Examiner erred as to the enablement rejection. We are not persuaded of error on the remaining rejections, and as to those rejections, we adopt as our own the findings and reasons set forth in the rejections from which the appeal is taken and in the Examiner's Answer. We provide the following for highlighting and emphasis.

Rejections Under 35 U.S.C. § 112

Appellants argue, Br. 5, the Examiner erred in

finding the Specification's "enablement is not commensurate in scope with the claims" and therefore erred in rejecting the claims as not enabled, Final Act. 5. Appellants contend the Specification demonstrates how the claim elements "are represented using the [claimed] phonetic symbol system," that the Specification "defines all the phonetic symbols," and that it "also gives examples." Br. 5.

The Examiner's Answer is silent regarding the enablement rejection, and does not respond to Appellants' arguments on that issue. Moreover, the pertinent findings in the Final Office Action appear directed to indefiniteness, non-statutory subject matter, and anticipation, not enablement. Final Act. 5. Accordingly, we do not sustain the rejection under pre-AIA 35 U.S.C. § 112, first paragraph.

As to the rejection under pre-AIA 35 U.S.C. § 112, second paragraph (indefiniteness), however, we are not persuaded of error. Appellants argue the invention is "claimed . . . the same way" as the prior art Su reference (an issued patent) and is "better," being "easy for people to learn and use." Br. 6. None of these arguments, however, are germane to the indefiniteness rejection. See, e.g., *Nautilus, Inc. v. BiosigInstr., Inc.*, 134 S. Ct. 2120, 2124 (2014) ("[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable

certainty, those skilled in the art about the scope of the invention.”) (emphasis added). As the Examiner finds, Final Act. 6, Appellants’ claims are “narrative in form and replete with indefinite language” that fails to apprise the scope of the claims. See *Ex parte Miyazaki*, 89 USPQ2d 1207, 1211-12 (BPAI 2008) (precedential); *Halliburton Energy Servs., Inc. v. M-ILLC*, 514 F.3d 1244, 1255 (Fed. Cir. 2008) (“it is highly desirable that patent examiners demand that applicants” resolve any “ambiguity in the patent claims . . . during prosecution”).

Accordingly, we sustain the rejection of claims 1—17, 19, 21, and 22 under pre-AIA 35 U.S.C. § 112, second paragraph, as indefinite.

Rejection Under 35 U.S.C. §101

Appellants argue the Examiner erred in finding the claims are directed to non-statutory subject matter, contending the claimed phonetic symbol system is “functional” and “tangible through things such as voice, writing, and other forms.” Br. 7.² These arguments are not persuasive of error.

² Appellants argue the claims as a group, and we choose claim 1 as representative of the group. See 37 C.F.R. § 41.37(c)(1)(iv).

As the Examiner finds, the “phonetic symbol system” recited in claim 1 is not a “process, machine, manufacture or composition of matter,” i.e., is not within one of the categories of patentable subject matter set forth in section 101. Ans. 4. Moreover, we discern no error in the Examiner’s finding that the claimed “system” is directed to the abstract idea of “defining” phonetic symbols in language, using strings of English letters. Id. at 5. It is well established that such “abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Inti.*, 134 S. Ct. 2347, 2354 (2014).

For the foregoing reasons, we sustain the rejection of claims 1—17, 19, 21, and 22 under pre-AIA 35 U.S.C. § 101.

Rejection Under 35 U.S.C. § 102(b)

Appellants argue the Examiner erred in finding Su anticipates claim 1 because “[Appellants’] invention use[s] letters of [the] English alphabet while Su’s phonetic symbols use[s] letters of [the] English alphabet and other characters.” Br. 7 (emphasis added). We are not persuaded of error.

As the Examiner finds, claim 1 does not require that all phonetic symbols in claim 1 use only English letters. Ans. 6. Claim 1 only recites “a plurality” of phonetic symbols, each defined by one or more English letters. Id.’, see also *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (claim terms are given their “their broadest reasonable interpretation consistent with the specification”). As the Examiner

finds, Su discloses this plurality of phonetic symbols. Ans. 6; Su col. 2, 11. 12-41, col. 3 (tables), col. 5 (tables).

For the same reasons explained above regarding claim 1, we also discern no error regarding the remaining claims. Appellants argue repeatedly that the claimed “invention is fundamentally different from Su’s phonetic symbol system [because] Su uses non-alphabetic characters.” Br. 8—11. Appellants, however, base their arguments on a general characterization of the Specification rather than limitations recited in the claims. See, e.g., *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369 (Fed. Cir. 2003) (although claims are interpreted “in view of the specification,” we do not “import[] limitations from the specification into the claims”).

Accordingly, we sustain the rejections of claims 1—5, 14, and 19 under pre-AIA 35 U.S.C. § 102(b) as anticipated by Su.

Rejection Under 35 U.S.C. § 103(a)

Appellants repeat the same arguments for obviousness as for anticipation. See Br. 11—19. Specifically, Appellants contend the claimed invention is “fundamentally different” from the prior art because Su uses “non-alphabetic characters” in addition to English letters, and that the claimed invention has many advantages. *Id.* at 11. For the reasons discussed above and set forth in the Examiner’s Answer, Ans. 13—28, we are not

persuaded of error.

Accordingly, we sustain the rejection of claims 6—13, 15—17, 21, and 22 under pre-AIA 35 U.S.C. § 103(a).

DECISION

We affirm the Examiner's rejections of claims 1—17, 19, 21, and 22.

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). See 37 C.F.R. § 41.50(f).

AFFIRMED

**APPENDIX C Patent Application 13/219,680
Abstract**

Application Number: 13/219,680

Filing Date: 08/28/2011

Applicants: George Wang & Lili Wang

Title: Phonetic Symbol System

ABSTRACT

A phonetic symbol system formed by phonetic symbols using letters of English Alphabet is described. The cases or the styles of the letters do not affect the sounds of the phonetic symbols. The phonetic symbols are systematically and logically defined. The phonetic symbol system can be used where language is involved. The phonetic symbol system provides convenient ways to represent languages. In some embodiments, the phonetic symbol system provides ways to represent English language.

**APPENDIX D Patent Application 13/219,680
Specification**

Application Number: 13/219,680

Filing Date: 08/28/2011

Applicants: George Wang & Lili Wang

Title: Phonetic Symbol System

SPECIFICATION

BACKGROUND

This application relates to language phonetic symbols and phonetic symbol systems.

The following is a tabulation of some prior art that presently appears relevant.

U.S. Patents

Patent Number	Issue Date	Patentee
US 6,468,083 B1	2002-10-22	Mathias
US 7,004,758 B2	2006-02-28	Su

Many languages are not phonetic. In these languages, pronouncing written words can be difficult.

Generally, people use phonetic symbol systems to represent the sounds.

Two popular phonetic symbol systems are International Phonetic Alphabet (IPA) and Webster Pronunciation Symbols. These phonetic symbol systems use diacritic marks or symbols that are different from letters of English alphabet. These marks and symbols are not only hard to learn but also hard to type using computer keyboards because most computer keyboards have been designed with English alphabet on the keys for conveniently inputting English alphabet.

Some phonetic symbol systems are using English alphabet. Simplified Respelling is one of such phonetic symbol systems used in some dictionaries. However, the Simplified Respelling systems used in these dictionaries use uppercase letters to represent sounds that are different from the sounds represented by the lower case letters, or they use italic style letters to represent sounds that are different from the sounds represented by the regular style letters. For example, they use *th* to represent the sound of "th" in English word *thin* and use *TH* or *th* to represent the sound of "th" in English word *this*.

NuEnglish may be considered as a Simplified Respelling. The problem with NuEnglish is not only it uses a macron (a bar over a vowel) to represent a long vowel but also it uses letter *u* to represent both the

sound of “a” in English word zebra and the sound of “u” in English word duck, while these two sounds are actually not the same.

The phonetic symbol system of the present invention uses letters of English alphabet to form phonetic symbols. It overcomes the problems mentioned above. The phonetic symbols are systematically and logically defined. The phonetic symbol system provides convenient ways to represent languages. It is easy for people to learn and use.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

A. First Preferred Embodiment

The phonetic symbol system is formed by phonetic symbols each of which is defined by one or more than one letter of English alphabet. The case or the style of the letter does not affect the sounds of the phonetic symbols. An English vowel or consonant is distinctively represented by one of the phonetic symbols. The phonetic symbols can be used to represent vowels, consonants, syllables, words, sentences, etc.

The phonetic symbols representing consonants are consonant phonetic symbols and the phonetic symbols representing vowels are vowel phonetic symbols. One English consonant corresponds to one of the

consonant phonetic symbols. One English vowel corresponds to one of the vowel phonetic symbols.

1. Vowel Phonetic Symbols

A vowel, except the vowel equivalent to the sound of “ir” in English word bird, is represented by a, e, i, o, u, or a series of letters each of which is a, e, i, o, or u. A vowel phonetic symbol with single letter is denoted by a, e, i, o, or u. Common vowel phonetic symbols are defined as follows.

Symbol a represents the sound equivalent to the sound of “a” in English word about. Symbol e represents the sound equivalent to the sound of “e” in English word bed. Symbol i represents the sound equivalent to the sound of “i” in English word dig. Symbol o represents the sound equivalent to the sound of “o” in English word hot. Symbol u represents the sound equivalent to the sound of “u” in English word up. Symbol aa represents the sound equivalent to the sound of “a” in English word father. Symbol ae represents the sound equivalent to the sound of “ai” in English word aid. Symbol ai represents the sound equivalent to the sound of “a” in English word apple. Symbol ao represents the sound equivalent to the sound of “a” in English word all. Symbol ee represents the sound equivalent to the sound of “ee” in English word see. Symbol ie represents the sound equivalent to the sound of “i” in English word idea. Symbol oe represents the sound equivalent to the sound of “o” in

English word go. Symbol oi represents the sound equivalent to the sound of “oi” in English word oil. Symbol oo represents the sound equivalent to the sound of “oo” in English word good. Symbol ou represents the sound equivalent to the sound of “ou” in English word out. Symbol ue represents the sound equivalent to the sound of “oo” in English word food. Symbol ur represents the sound equivalent to the sound of “ir” in English word bird.

Examples of words using common vowel phonetic symbols are shown in Table 1.

Table 1 Examples of Words Using Common Vowel Phonetic Symbols

Vowel Phonetic Symbols	Phonetic Word Examples	Corresponding English Words
a	about, zeebra	about, zebra
e	bed, hed	bed, head
i	dig, it	dig, it
o	hot, od	hot, odd
u	duk, up	duck, up
aa	kaam, paam	calm, palm
ae	aed, dae	aid, day
ai	aipl, hait	apple, hat
ao	aol, laost	all, lost
ee	dileet, eec	delete, each
ie	dinie, hied	deny, hide
oe	goe, roed	go, road
oi	boil, toi	boil, toy
oo	good, poot	good, put
ou	out, loud	out, loud
ue	fued, myuezik	food, music
ur	burd, urj	bird, urge

Some of the vowels listed above are compound vowels. Vowel phonetic symbols for representing compound vowels not listed above can generally be derived from the above vowel phonetic symbols. The following is a common way for deriving these vowel phonetic symbols.

A compound vowel can generally be represented by a compound of vowel phonetic symbols. When a compound vowel is represented by a compound of vowel phonetic symbols, sound of the compound vowel is pronounced by continuously pronouncing each of the sounds of the vowel phonetic symbols one after another. The compound of the vowel phonetic symbols representing the compound vowel is the vowel phonetic symbol for the compound vowel.

For example, symbol aea is a compound of symbol ae and symbol a, symbol ea is a compound of symbol e and symbol a, symbol iea is a compound of symbol ie and symbol a, symbol ia is a compound of symbol i and symbol a, symbol oea is a compound of symbol oe and symbol a, symbol oia is a compound of symbol oi and symbol a, symbol ooa is a compound of symbol oo and symbol a, symbol oua is a compound of symbol ou and symbol a, and symbol uea is a compound of symbol ue and symbol a.

2. Consonant Phonetic Symbols

Consonant phonetic symbols are defined as follows.

Symbol b represents the sound equivalent to the sound of “b” in English word boy. Symbol c represents the sound equivalent to the sound of “ch” in English word check. Symbol d represents the sound equivalent to the sound of “d” in English word dig. Symbol dh represents the sound equivalent to the sound of “th” in English word this. Symbol f represents the sound

equivalent to the sound of "f" in English word free. Symbol g represents the sound equivalent to the sound of "g" in English word good. Symbol h represents the sound equivalent to the sound of "h" in English word hot. Symbol j represents the sound equivalent to the sound of "j" in English word just. Symbol k represents the sound equivalent to the sound of "ck" in English word check. Symbol l represents the sound equivalent to the sound of "l" in English word list. Symbol m represents the sound equivalent to the sound of "m" in English word more. Symbol n represents the sound equivalent to the sound of "n" in English word snow. Symbol ng represents the sound equivalent to the sound of "ng" in English word long. Symbol p represents the sound equivalent to the sound of "p" in English word put. Symbol r represents the sound equivalent to the sound of "r" in English word run. Symbol s represents the sound equivalent to the sound of "s" in English word start. Symbol sh represents the sound equivalent to the sound of "sh" in English word shop. Symbol t represents the sound equivalent to the sound of "t" in English word top. Symbol th represents the sound equivalent to the sound of "th" in English word thin. Symbol v represents the sound equivalent to the sound of "v" in English word vote. Symbol w represents the sound equivalent to the sound of "w" in English word wear. Symbol x represents the sound equivalent to the sound of "ge" in English word beige.

Symbol y represents the sound equivalent to the sound of "y" in English word young. Symbol z represents the sound equivalent to the sound of "z" in English word zoo.

Examples of words using consonant phonetic symbols are shown in Table 2.

3. Sentence

The phonetic symbols can be used to represent sentences. For example, English sentence "This is great." can be represented as "Dhis iz graet."

B. Second Preferred Embodiment

This embodiment is based on the first preferred embodiment and can also be applied to some other embodiments. In this embodiment, vowel phonetic symbols a, e, i, o, u, aa, ae, ai, ao, ee, ie, oe, oi, oo, ou, ue, ur, and consonant phonetic symbols are defined the same way as the ones in the first preferred embodiment. In addition, this embodiment provides one of the ways to specify spellings of the combinations of vowels and the r-sound.

We call the sound equivalent to the sound "r" in English word teacher r-sound. The r-sound is pronounced in some English dialects such as American English but is not pronounced in some English dialects such as British English.

Table 2 Examples of Words Using Consonant Phonetic Symbols

Consonant Phonetic Symbols	Phonetic Word Examples	Corresponding English Words
b	boi, baebi	boy, baby
c	cek, woc	check, watch
d	dig, red	dig, red
dh	breedh, dhis	breathe, this
f	free, tuf	free, tough
g	good, graet	good, great
h	ahed, hot	ahead, hot
j	aej, just	age, just
k	cek, kyuet	check, cute
l	lief, list	life, list
m	maek, tiem	make, time
n	injoiabl, snoe	enjoyable,
ng	long, sing	long, sing
p	keep, poot	keep, put
r	run, veri	run, very
s	faesiz, promis	faces, promise
sh	poosh, shop	push, shop
t	its, tops	its, tops
th	maith, thrue	math, through
v	stoev, voet	stove, vote
w	awae, wontid	away, wanted
x	baex, telivixan	beige,
y	unyan, yes	onion, yes
z	buz, eezi	buzz, easy

Generally, combinations of vowels with the r-sound can be represented by adding letter r to the ends of the vowel phonetic symbols. The following are examples.

Symbol aar represents the sound equivalent to the sound of "ar in English word arm. Symbol aear represents the sound equivalent to the sound of "ayer" in English word layer. Symbol aor represents the sound equivalent to the sound of "or" in English word for. Symbol ar represents the sound equivalent to the sound of "er" in English word teacher. Symbol ear represents the sound equivalent to the sound of "are" in English word dare. Symbol iear represents the sound equivalent to the sound of "ire" in English word fire. Symbol iar represents the sound equivalent to the sound of "ear" in English word dear. Symbol oear represents the sound equivalent to the sound of "ower" in English word lower. Symbol oiar represents the sound equivalent to the sound of "oyer" in English word employer. Symbol ooar represents the sound equivalent to the sound of "our" in English word tour. Symbol or represents the sound equivalent to the sound of "or" in English word coral. Symbol ouar represents the sound equivalent to the sound of "ower" in English word power. Symbol uear represents the sound equivalent to the sound of "ewer" in English word brewer.

In the first preferred embodiment, there are

examples showing some compound vowel phonetic symbols. If the r-sound is not pronounced, symbol aea and symbol aear are pronounced the same, symbol ea and symbol ear are pronounced the same, symbol iea and symbol iear are pronounced the same, symbol ia and symbol iar are pronounced the same, symbol oea and symbol oear are pronounced the same, symbol oia and symbol oiar are pronounced the same, symbol ooa and symbol ooar are pronounced the same, symbol oua and symbol ouar are pronounced the same, and symbol uea and symbol uear are pronounced the same.

C. Third Preferred Embodiment

This embodiment is based on the first preferred embodiment and can also be applied to some other embodiments. In this embodiment, vowel phonetic symbols a, e, i, o, u, aa, ae, ai, ao, ee, ie, oe, oi, oo, ou, ue, ur, and consonant phonetic symbols are defined the same way as the ones in the first preferred embodiment. In addition, this embodiment provides one of the ways to simplify some spellings of the combinations of vowels and the r-sound.

Generally, combinations of vowels with the r-sound can be represented by adding letter r to the ends of the vowel phonetic symbols. However, some can be simplified. For example, aer, er, ier, ir, oer, oir, oor, our and uer are simplified forms of aear, ear, iear, iar, oear, oiar, ooar, ouar and uear respectively. The following explains these examples.

Symbol aer represents the sound equivalent to the sound of “ayer” in English word layer. Symbol er represents the sound equivalent to the sound of “are” in English word dare. Symbol ier represents the sound equivalent to the sound of “ire” in English word fire. Symbol ir represents the sound equivalent to the sound of “ear” in English word dear. Symbol oer represents the sound equivalent to the sound of “ower” in English word lower. Symbol oir represents the sound equivalent to the sound of “oyer” in English word employer. Symbol oor represents the sound equivalent to the sound of “our” in English word tour. Symbol our represents the sound equivalent to the sound of “ower” in English word power. Symbol uer represents the sound equivalent to the sound of “ewer” in English word brewer.

D. Fourth Preferred Embodiment

This embodiment is based on the first preferred embodiment and can also be applied to some other embodiments. In this embodiment, vowel phonetic symbols a, e, i, o, u, aa, ae, ai, ao, ee, ie, oe, oi, oo, ou, ue, ur, and consonant phonetic symbols are defined the same way as the ones in the first preferred embodiment. In addition, this embodiment provides rules for the use of symbol r.

Within a word, if an r is immediately before a vowel, the r is in the same syllable which the vowel is in. Otherwise, an r is in the same syllable which the

vowel which the r is immediately after is in.

In the following phonetic word examples, the r is in the same syllable which the vowel which the r is before is in:

run

riet

rai

veri

In the following phonetic word examples, the r is in the same syllable which the vowel which the r is immediately after is in:

teecar

aiftarnuen

faorward

In the following phonetic word example, the first r is in the same syllable which the vowel which the r is immediately after is in and the second r is in the same syllable which the vowel which the r is before is in:

waorran

E. Fifth Preferred Embodiment

This embodiment is based on the first preferred embodiment and can also be applied to some other embodiments. In this embodiment, vowel phonetic symbols a, e, i, o, u, aa, ae, ai, ao, ee, ie, oe, oi, oo, ou,

ue, ur, and consonant phonetic symbols are defined the same way as the ones in the first preferred embodiment. In addition, this embodiment uses a silent symbol.

A silent symbol is a special phonetic symbol. We use symbol q to represent a silent symbol. Symbol q is not pronounced. It can be used as a separator. When being used as a separator, symbol q separates two letters in a word if the two letters connected to each other are not in one consonant, vowel, or syllable but are easy to be confused as in one consonant, vowel, or syllable.

F. Sixth Preferred Embodiment

This embodiment is an alternative embodiment to the first preferred embodiment and can also be applied to some other embodiments. In this embodiment, vowel phonetic symbols a, e, i, o, u, aa, ae, ai, ao, ee, ie, oe, oi, oo, ou, ue, ur, and consonant phonetic symbols are defined the same way as the ones in the first preferred embodiment except using symbol q instead of ng to represent the sound equivalent to the sound of “ng” in English word long.

**APPENDIX E Patent Application 13/219,680
Claims**

Application Number: 13/219,680

Filing Date: 08/28/2011

Amendment Date: 02/03/2014

Applicants: George Wang & Lili Wang

Title: Phonetic Symbol System

CLAIMS

What is claimed is:

1. (Original) 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, 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.

2. (Original) 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, 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 English vowel is distinctively represented by one of said vowel phonetic symbols, and each English consonant is distinctively represented by one of said consonant phonetic symbols.

3. (Original) The phonetic symbol system of claim 2 wherein each of English vowels except the vowel equivalent to the sound of "ir" of English word bird is represented by a, e, i, o, u, or a series of letters each of which is a, e, i, o, or u.

4. (Original) The phonetic symbol system of claim 2 wherein symbol a represents the sound equivalent to the sound of "a" in English word about.

5. (Original) The phonetic symbol system of claim 2 wherein symbol u represents the sound equivalent to the sound of "u" in English word up.

6. (Original) The phonetic symbol system of claim 2 wherein symbol ai represents the sound equivalent to the sound of "a" in English word apple.

7. (Original) The phonetic symbol system of claim 2 wherein symbol ao represents the sound equivalent to the sound of "a" in English word all.

8. (Original) The phonetic symbol system of claim 2 wherein symbol ar represents the sound equivalent to the sound of "er" in English word teacher.

9. (Original) The phonetic symbol system of claim 2 wherein symbol ur represents the sound equivalent to the sound of "ir" in English word bird.

10. (Original) The phonetic symbol system of claim 2 wherein symbol x represents the sound equivalent to the sound of "ge" in English word beige.

11. (Original) The phonetic symbol system of claim 2 wherein symbol q represents the sound equivalent to the sound of "ng" in English word long.

12. (Original) The phonetic symbol system of claim 2 wherein symbol q represents a silent symbol, and said symbol q can be used as a separator to separates two letters if the two letters connected to each other are not in one consonant, vowel, or syllable but are easy to be confused as in one consonant, vowel, or syllable.

13. (Original) The phonetic symbol system of claim 2 wherein the following rule is used to determine which syllable an r is in:

within a word, if an r is immediately before a vowel, the r is in the same syllable which said vowel is in, and otherwise an r is in the same syllable which the vowel which the r is immediately after is in.

14. (Original) The phonetic symbol system of claim 2 wherein

symbol a represents the sound equivalent to the sound of “a” in English word about,

symbol e represents the sound equivalent to the sound of “e” in English word bed,

symbol i represents the sound equivalent to the sound of “i” in English word dig,

symbol o represents the sound equivalent to the sound of “o” in English word hot, and

symbol u represents the sound equivalent to the sound of “u” in English word up.

15. (Original) The phonetic symbol system of claim 2 wherein

symbol aa represents the sound equivalent to the sound of “a” in English word father,

symbol ae represents the sound equivalent to the sound of “ai” in English word aid,

symbol ai represents the sound equivalent to the sound of “a” in English word apple,

symbol ao represents the sound equivalent to the sound of “a” in English word all,

symbol ee represents the sound equivalent to the sound of “ee” in English word see,

symbol ie represents the sound equivalent to the sound of “i” in English word idea,

symbol oe represents the sound equivalent to the sound of “o” in English word go,

symbol oi represents the sound equivalent to the sound of “oi” in English word oil,

symbol oo represents the sound equivalent to the sound of “oo” in English word good,

symbol ou represents the sound equivalent to the sound of “ou” in English word out,

symbol ue represents the sound equivalent to the sound of “oo” in English word food, and

symbol ur represents the sound equivalent to the sound of “ir” in English word bird.

16. (Original) The phonetic symbol system of claim 2 wherein

symbol aar represents the sound equivalent to the sound of “ar in English word arm,

symbol aer represents the sound equivalent to the sound of “ayer” in English word layer,

symbol aor represents the sound equivalent to the sound of “or” in English word for,

symbol ar represents the sound equivalent to the sound of “er” in English word teacher,

symbol er represents the sound equivalent to the sound of “are” in English word dare,

symbol ier represents the sound equivalent to the sound of “ire” in English word fire,

symbol ir represents the sound equivalent to the sound of “ear” in English word dear,

symbol oer represents the sound equivalent to the sound of “ower” in English word lower,

symbol oir represents the sound equivalent to the sound of “oyer” in English word employer,

symbol oor represents the sound equivalent to the sound of “our” in English word tour,

symbol or represents the sound equivalent to the sound of “or” in English word coral,

symbol our represents the sound equivalent to the sound of “ower” in English word power, and

symbol uer represents the sound equivalent to the sound of “ewer” in English word brewer.

17. (Original) The phonetic symbol system of claim 2 wherein

symbol b represents the sound equivalent to the sound of “b” in English word boy,

symbol c represents the sound equivalent to the sound of “ch” in English word check,

symbol d represents the sound equivalent to the sound of "d" in English word dig,

symbol dh represents the sound equivalent to the sound of "th" in English word this,

symbol f represents the sound equivalent to the sound of "f" in English word free,

symbol g represents the sound equivalent to the sound of "g" in English word good,

symbol h represents the sound equivalent to the sound of "h" in English word hot,

symbol j represents the sound equivalent to the sound of "j" in English word just,

symbol k represents the sound equivalent to the sound of "ck" in English word check,

symbol l represents the sound equivalent to the sound of "l" in English word list,

symbol m represents the sound equivalent to the sound of "m" in English word more,

symbol n represents the sound equivalent to the sound of "n" in English word snow,

symbol ng represents the sound equivalent to the sound of "ng" in English word long,

symbol p represents the sound equivalent to the sound of "p" in English word put,

symbol r represents the sound equivalent to the sound of “r” in English word run,

symbol s represents the sound equivalent to the sound of “s” in English word start,

symbol sh represents the sound equivalent to the sound of “sh” in English word shop,

symbol t represents the sound equivalent to the sound of “t” in English word top,

symbol th represents the sound equivalent to the sound of “th” in English word math,

symbol v represents the sound equivalent to the sound of “v” in English word vote,

symbol w represents the sound equivalent to the sound of “w” in English word wear,

symbol x represents the sound equivalent to the sound of “ge” in English word beige,

symbol y represents the sound equivalent to the sound of “y” in English word young, and

symbol z represents the sound equivalent to the sound of “z” in English word zoo.

18. (Canceled)

19. (Original) 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 twenty five letters from English alphabet, 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 English vowel is distinctively represented by one of said vowel phonetic symbols, and each English consonant is distinctively represented by one of said consonant phonetic symbols.

20. (Canceled)

21. (Previously Presented) The phonetic symbol system of claim 2 wherein

symbol b represents the sound equivalent to the sound of "b" in English word boy,

symbol c represents the sound equivalent to the sound of "ch" in English word check,

symbol d represents the sound equivalent to the sound of "d" in English word dig,

symbol dh represents the sound equivalent to the sound of "th" in English word this,

symbol f represents the sound equivalent to the sound of "f" in English word free,

symbol g represents the sound equivalent to the sound of "g" in English word good,

symbol h represents the sound equivalent to the sound of “h” in English word hot,

symbol j represents the sound equivalent to the sound of “j” in English word just,

symbol k represents the sound equivalent to the sound of “ck” in English word check,

symbol l represents the sound equivalent to the sound of “l” in English word list,

symbol m represents the sound equivalent to the sound of “m” in English word more,

symbol n represents the sound equivalent to the sound of “n” in English word snow,

symbol p represents the sound equivalent to the sound of “p” in English word put,

symbol q represents the sound equivalent to the sound of “ng” in English word long,

symbol r represents the sound equivalent to the sound of “r” in English word run,

symbol s represents the sound equivalent to the sound of “s” in English word start,

symbol sh represents the sound equivalent to the sound of “sh” in English word shop,

symbol t represents the sound equivalent to the sound of “t” in English word top,

symbol th represents the sound equivalent to the sound of “th” in English word math,

symbol v represents the sound equivalent to the sound of “v” in English word vote,

symbol w represents the sound equivalent to the sound of “w” in English word wear,

symbol x represents the sound equivalent to the sound of “ge” in English word beige,

symbol y represents the sound equivalent to the sound of “y” in English word young, and

symbol z represents the sound equivalent to the sound of “z” in English word zoo.

22. (Previously Presented) The phonetic symbol system of claim 19 wherein

symbol a represents the sound equivalent to the sound of “a” in English word about,

symbol e represents the sound equivalent to the sound of “e” in English word bed,

symbol i represents the sound equivalent to the sound of “i” in English word dig,

symbol o represents the sound equivalent to the sound of “o” in English word hot,

symbol u represents the sound equivalent to the sound of “u” in English word up,

symbol aa represents the sound equivalent to the sound of “a” in English word father,

symbol ae represents the sound equivalent to the sound of “ai” in English word aid,

symbol ai represents the sound equivalent to the sound of “a” in English word apple,

symbol ao represents the sound equivalent to the sound of “a” in English word all,

symbol ee represents the sound equivalent to the sound of “ee” in English word see,

symbol ie represents the sound equivalent to the sound of “i” in English word idea,

symbol oe represents the sound equivalent to the sound of “o” in English word go,

symbol oi represents the sound equivalent to the sound of “oi” in English word oil,

symbol oo represents the sound equivalent to the sound of “oo” in English word good,

symbol ou represents the sound equivalent to the sound of “ou” in English word out,

symbol ue represents the sound equivalent to the sound of “oo” in English word food,

symbol ur represents the sound equivalent to the sound of “ir” in English word bird,

symbol b represents the sound equivalent to the sound of “b” in English word boy,

symbol c represents the sound equivalent to the sound of “ch” in English word check,

symbol d represents the sound equivalent to the sound of “d” in English word dig,

symbol dh represents the sound equivalent to the sound of “th” in English word this,

symbol f represents the sound equivalent to the sound of “f” in English word free,

symbol g represents the sound equivalent to the sound of “g” in English word good,

symbol h represents the sound equivalent to the sound of “h” in English word hot,

symbol j represents the sound equivalent to the sound of “j” in English word just,

symbol k represents the sound equivalent to the sound of “ck” in English word check,

symbol l represents the sound equivalent to the sound of “l” in English word list,

symbol m represents the sound equivalent to the sound of “m” in English word more,

symbol n represents the sound equivalent to the sound of “n” in English word snow,

symbol ng represents the sound equivalent to the sound of “ng” in English word long,

symbol p represents the sound equivalent to the sound of “p” in English word put,

symbol r represents the sound equivalent to the sound of “r” in English word run,

symbol s represents the sound equivalent to the sound of “s” in English word start,

symbol sh represents the sound equivalent to the sound of “sh” in English word shop,

symbol t represents the sound equivalent to the sound of “t” in English word top,

symbol th represents the sound equivalent to the sound of “th” in English word math,

symbol v represents the sound equivalent to the sound of “v” in English word vote,

symbol w represents the sound equivalent to the sound of “w” in English word wear,

symbol x represents the sound equivalent to the sound of “ge” in English word beige,

symbol y represents the sound equivalent to the sound of “y” in English word young, and

symbol z represents the sound equivalent to the sound of “z” in English word zoo.