



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.
14/760,017	07/09/2015	Zachary FIELDS	FEG1839US2	9093
78537	7590	09/23/2020	EXAMINER	
Cantor Colburn LLP - Fox Entertainment Group 20 Church Street 22nd Floor Hartford, CT 06103			REPSHER III, JOHN T	
			ART UNIT	PAPER NUMBER
			2143	
			NOTIFICATION DATE	DELIVERY MODE
			09/23/2020	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):

usptopatentmail@cantorcolburn.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ZACHARY FIELDS, DANNY TELLO, ANDY BLONDIN, and
GEOFFREY K. HULL

Appeal 2019-003481
Application 14/760,017
Technology Center 2100

Before ELENI MANTIS MERCADER, JUSTIN BUSCH, and
MATTHEW J. McNEILL, *Administrative Patent Judges*.

BUSCH, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from a rejection of claims 1–22. We have jurisdiction over the pending claims under 35 U.S.C. § 6(b).

We affirm.

¹ We use the term “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies “Fox Sports Productions, Inc.” as the real party in interest. Appeal Br. 2.

STATEMENT OF THE CASE

Introduction

Appellant's disclosure generally relates "to presentation of and interaction with a three dimensional (3D) representation of a vehicle." Spec. ¶ 1. More specifically, the claimed subject matter includes methods and systems for presenting a 3D representation of a vehicle to a viewer, accepting input indicating a desired view of the vehicle, and changing the 3D representation to correspond to the user input. Spec. ¶¶ 4–6, Figs. 3–4. Claims 1 and 12 are independent claims, and claim 1 is reproduced below:

1. A method for viewer interaction relative to a 3D representation of a vehicle, comprising:

providing an interface to a viewer;

presenting a 3D vehicle representation to the viewer;

receiving input from the viewer relative to a desired aspect or perspective of the vehicle; and

adjusting or changing the 3D vehicle representation to correspond with an indicated desired aspect or perspective, the indicated desired aspect or perspective of a vehicle comprising manipulation of a virtual 3D vehicle by a broadcast analyst on-air, with selection of components in various states of assembly and manipulation of the virtual 3D vehicle to provide specific display of partially assembled or isolated components using a broadcast display interface, and wherein said broadcast further includes advertising presented therein along with display of said manipulated virtual 3D vehicle.

The Pending Rejections

Claims 1–22 stand rejected under 35 U.S.C. § 112(b), as indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Final Act. 3–4.

Claims 1, 2, 5, 6, 10–13, 16, 17, 21, and 22 stand rejected under 35 U.S.C. § 103 as obvious in view of Sells (US 2009/0005928 A1; Jan. 1, 2009), Segal (US 2011/0298935 A1; Dec. 8, 2011), and Dengler (US 2005/0001852 A1; Jan. 6, 2005). Final Act. 7–19.

Claims 3, 4, 7–9, 14, 15, and 18–20 stand rejected under 35 U.S.C. § 103 as obvious in view of Sells, Segal, Dengler, and Hertenstein (US 2011/0218825 A1; Sept. 8, 2011). Final Act. 20–27.

ANALYSIS

REJECTION UNDER 35 U.S.C. § 112(B)

The Examiner rejects claims 1–22 under 35 U.S.C. § 112(b) as indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Final Act. 3–4. The relevant portions of claim 1 recite “receiving input from the viewer relative to [1] a desired aspect or perspective of the vehicle” and “adjusting or changing the 3D vehicle representation to correspond with [2] an indicated desired aspect or perspective, [3] the indicated desired aspect or perspective of a vehicle comprising manipulation of a virtual 3D vehicle by a broadcast analyst on-air.” Appeal Br. 31 (bracketed reference numerals added to indicate the limitations we refer to as “phrase 1,” “phrase 2,” and “phrase 3,” respectively).

Specifically, the Examiner finds it is unclear whether phrase 3 refers back to (i.e., has antecedent basis in) phrase 1 or phrase 2. Final Act. 3–4; Ans. 23. The Examiner also finds it is unclear whether “a vehicle,” recited in phrase 3, refers back to any previously recited vehicle limitation, such as “the vehicle” recited in phrase 1. Ans. 23. Similarly, the Examiner finds it is unclear whether (3) “the indicated desired aspect or perspective of a

vehicle,” recited in claim 12, refers back to (1) “a desired aspect or perspective of the vehicle” or (2) “a viewer indicated desired aspect or perspective.” Final Act. 4; Ans. 24–25.

Appellant argues these limitations are not inconsistent or unclear. Appeal Br. 5–6; Reply Br. 2–3. Appellant argues “[i]t directly follows that when viewer provides input relative to a ‘desired aspect or perspective’, that viewer *has indicated* a desired aspect or perspective.” Reply Br. 2.

Appellant also argues phrase 2 clearly relates to an aspect or perspective “of a vehicle” because the claim recites “changing the 3D vehicle representation to correspond with” the recited aspect or perspective. Appeal Br. 5. Thus, Appellant appears to argue phrase 1 refers to a viewer-desired vehicle perspective and phrases 2 and 3 refer to the same desired vehicle perspective once the viewer has indicated that perspective. *See* Appeal Br. 5; Reply Br. 2–3. Accordingly, we understand Appellant to assert that phrases 1 through 3 are all referring to the same vehicle perspective and that phrases 2 and 3 are modified to show that the user already has indicated that the particular vehicle perspective is desired.

Notwithstanding Appellant’s inconsistent terminology and article use, a person of ordinary skill in the art may have understood each of phrases 1 through 3 (i.e., “a desired aspect or perspective of the vehicle,” “an indicated desired aspect or perspective [of the vehicle],” and “the indicated desired aspect or perspective of a vehicle”), taken individually, to refer to the same vehicle perspective. However, even assuming that these terms clearly and unambiguously refer to the same perspective, the remaining claim language further confuses, rather than clarifies, the meaning of claim 1.

Reviewing the meaning of the claim as a whole demonstrates the ambiguity in the various limitations. When construing claim terminology during prosecution before the Office, claims are to be given their broadest reasonable interpretation consistent with the Specification, reading claim language in light of the Specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). We presume that claim terms have their ordinary and customary meaning. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007) (“The ordinary and customary meaning is the meaning that the term would have to a person of ordinary skill in the art in question.”) (Internal quotation marks omitted).

Method claim 1 recites four steps. The first step merely recites “providing an interface to a viewer.” Appeal Br. 31. Notably, the only other reference to any “interface” in claim 1 is “a broadcast display interface.” Appeal Br. 31. It is unclear whether the “broadcast display interface” recited in claim 1 is part of the “interface” recited in the first step. Certain dependent claims appear to reference the “interface” recited in claim 1—for example, claim 5 recites that “said interface comprises a touchscreen display interface,” claim 6 recites “said interface comprises a mobile device interface,” claim 7 recites “said interface comprises a web interface,” claim 8 recites “said interface comprises a touchscreen display at a first interface and a mobile interface at a second location,”² and claim 9 recites “said interface comprises a production broadcast display screen and at least one

² Presumably Appellant intends this limitation to read: “said interface comprises a touchscreen display at a first *location* and a mobile interface at a second location.” We encourage the Examiner and Appellant to clarify this language.

remote mobile device configured to control the production broadcast display screen.” Appeal Br. 31–32. Notably, at least in light of claims 8 and 9, claim 1’s interface may include multiple elements (e.g., a screen and a mobile device configured to control the screen) and more than one interface (e.g., interfaces at two locations).

The second step recites “presenting a 3D vehicle representation to the viewer.” Appeal Br. 31. The third step recites “receiving input from the viewer relative to a desired aspect or perspective of the vehicle” (this limitation includes phrase 1). Appeal Br. 31. Notably, neither step requires using the interface recited in the first step. We construe the second step to require displaying to a viewer a three-dimensional image of a vehicle (whether presented using two-dimensional or three-dimensional technology, *see* Spec. ¶ 24 (describing a 3D representation as “either actual 3D or a 2D representation of the 3D object”)) and the third step to require a system to accept viewer input (in any manner) concerning an “aspect or perspective of the vehicle” that the user wants to view.

The final step recites:

adjusting or changing the 3D vehicle representation to correspond with an indicated desired aspect or perspective, the indicated desired aspect or perspective of a vehicle *comprising* [1] manipulation of a virtual 3D vehicle by a broadcast analyst on-air, with selection of components in various states of assembly and [2] manipulation of the virtual 3D vehicle to provide specific display of partially assembled or isolated components using a broadcast display interface, and wherein said broadcast further includes advertising presented therein along with display of said manipulated virtual 3D vehicle.

Appeal Br. 31. As seen in the quoted language, the final step includes phrases 2 and 3.

Because “the 3D vehicle representation” is an image presented to the viewer, the plain and ordinary meaning of this limitation would require changing that image displayed to the viewer in the second step to an image representing the vehicle corresponding to a desired aspect or perspective indicated by the viewer input received in the third step. This is consistent with the Specification, which describes the invention as allowing “a viewer to adjust a representation of a vehicle to a desired aspect or perspective.” Spec. ¶ 21, Fig. 1; *see also* Spec. ¶ 22 (“[T]he viewer may be any type of viewer, such as a broadcast commentator, a vehicle expert, or any other type of viewer, such as the end user of a computer interface, a user of a mobile device, etc.”).

However, claim 1 recites two additional limitations (numbered in the final step reproduced above) regarding “the indicated desired aspect or perspective of a vehicle.” Specifically, this indicated desired vehicle perspective comprises manipulation of a virtual 3D vehicle (presumably the same vehicle for which a 3D vehicle representation is presented to the viewer) by “a broadcast analyst on-air” and to provide a particular display “using a broadcast display interface.” We note that claim 1 recites two people: (1) a “viewer” to whom the first step provides the interface and the second step presents the 3D vehicle representation and from whom the third step receives input (the input being “relative to a desired aspect or perspective of the vehicle) and (2) “a broadcast analyst on-air” (in the phrase “the indicated desired aspect or perspective of a vehicle comprising

manipulation of a virtual 3D vehicle by a broadcast analyst on-air”).³

Appeal Br. 31.

Generally, the plain meaning of a claim ascribes different meanings to different terms. *See Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 93 F.3d 1572, 1579 (Fed. Cir. 1996). Assuming the “viewer” and “broadcast analyst on-air” are not the same person and accepting Appellant’s assertion that phrases 1 through 3 all refer to the same desired vehicle aspect or perspective, it is unclear how this desired aspect or perspective can (1) be indicated by the received viewer input *and* (2) comprise “manipulation of a virtual 3D vehicle by a broadcast analyst on-air . . . and manipulation of the virtual vehicle . . . using a broadcast display interface.” Specifically, if the adjusted 3D vehicle representation corresponds with a desired perspective indicated by the viewer, it is unclear how the representation also can comprise manipulation by a different person.

We find nothing in the Specification to clarify this or to suggest that another person (e.g., the broadcast analyst or other intermediary) manipulates the vehicle representation to correspond with the received viewer input. To the contrary, the Specification indicates that the viewer is the person controlling the manipulation of the vehicle. *See, e.g.*, Spec. ¶ 36 (“viewers can thoroughly explore 3D aspects of a vehicle” by “allow[ing] a viewer to navigate through aspects and perspectives of the vehicle” thereby “provid[ing] a rich viewing experience.”). To the extent the “viewer” and

³ It is further unclear whether the term “on-air” describes the broadcast analyst or indicates that the “manipulation” is done “on-air.”

“broadcast analyst on-air” are intended to be the same person, the claims do not clearly convey that.⁴

Reviewing the rest of claim 1 (and corresponding limitations in independent claim 12) and the dependent claims fails to clarify these ambiguities. For example, claim 1 also recites that “said broadcast further includes advertising presented therein along with display of said manipulated virtual 3D vehicle.” However, there is no prior recitation of “a broadcast,” so it is unclear what broadcast this limitation is further defining. The only previous references to the term “broadcast” in claim 1 are “a broadcast analyst on-air” and “a broadcast display interface.”

Claim 2 recites a third person—“a broadcast personnel.” Appeal Br. 31. The use of two different terms suggests that the “broadcast personnel” and “viewer” are different people, but claim 2 explicitly recites that “said input [(from the third step in claim 1)] from a viewer is input from a broadcast personnel.” Appeal Br. 31. Claim 3, which depends from claim 2 further recites “said presentation comprises manipulation of a virtual 3D car by a broadcast analyst.” Appeal Br. 31 (emphases added). Once again, it is unclear whether (1) claim 3’s “a broadcast analyst” is the same person as any or all of claim 1’s “broadcast analyst on-air,” claim 1’s “viewer,” and

⁴ We note the Examiner’s rejection under 35 U.S.C. § 101 was withdrawn. Ans. 22. Depending on the scope of the claims after Appellant clarifies them, we leave it to the Examiner to consider whether the amended claims recite eligible subject matter or are directed to abstract ideas. *See, e.g., Two-Way Media Ltd. V. Comcast Cable Commc’ns, LLC*, 874 F.3d 1329 (2017); *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253 (Fed. Cir. 2016). For example, if the viewer and broadcast analyst are the same person, the claim appears to be directed to presenting information (a 3D representation of a vehicle) that may be modified in response to user input.

claim 2’s “broadcast personnel and (2) claim 3’s “virtual 3D car” is the same as claim 1’s “virtual 3D vehicle.” Claim 4 recites “said presentation further comprises selection of a vehicle component and manipulation of a displayed aspect of said vehicle component by said broadcast analyst.” To the extent claim 1’s “broadcast analyst on-air” is different than “a broadcast analyst recited in claim 2,” it is unclear in which of these two people claim 3’s “said broadcast analyst” refers back and has antecedent basis.

The patent statute requires that a claim “particularly point[] out and distinctly claim[] the subject matter which the inventor or a joint inventor regards as the invention.” 35 U.S.C. § 112(b); *see In re Packard*, 751 F.3d 1307, 1313 (Fed. Cir. 2014) (“claims are required to be cast in clear—as opposed to ambiguous, vague, indefinite—terms”); *see also Ex parte McAward*, Appeal 2015-006416, 2017 WL 3669566, at *5 (PTAB Aug. 25, 2017) (precedential) (explaining that the USPTO finds a “claim is indefinite when it contains words or phrases whose meaning is unclear” (quoting *Packard*, 751 F.3d at 1314)).

For the above reasons, we agree with the Examiner that independent claims 1 and 12, as well as claims 2–11 and 13–22 depending therefrom, are indefinite. Accordingly, we sustain the rejection of claims 1–22 under 35 U.S.C. § 112(b) as indefinite.

REJECTION UNDER 35 U.S.C. § 103

Appellant argues the rejection of all pending claims under 35 U.S.C. § 103 based on the limitations recited in independent claim 1. *See* Appeal Br. 15–19. Appellant also presents separate arguments for certain dependent claims with respect to the rejections under 35 U.S.C. § 103. *See* Appeal Br. 19–27 (arguing claims 5, 8, 12, and 21–26 recite additional limitations

that distinguish the claims over the cited prior art). Therefore, we select independent claim 1 as representative with respect to Appellant’s arguments applicable to all pending claims. *See* 37 C.F.R. § 41.37(c)(1)(iv). We subsequently address Appellant’s separate arguments regarding claims 5, 8, 12, and 21–26.

It is ordinarily improper to reject a claim over prior art when the meaning of a claim cannot be determined. As the predecessor to our reviewing court explained, “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art” and “[i]f no reasonably definite meaning can be ascribed to certain terms in the claim, the subject matter does not become obvious—the claim becomes indefinite.” *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970); *see also, In re Steele*, 305 F.2d 859, 862-63 (CCPA 1962) (“As we have previously indicated, our analysis of the claims leaves us in a quandary as to what in fact is covered by them. We think the examiner and the board were wrong in relying on what at best are speculative assumptions as to the meaning of the claims and basing a rejection under 35 U.S.C. § 103 thereon.”).

However, in this case, we dispose of the rejection under 35 U.S.C. § 103 based on a determination that the rejection’s rationale for combining the prior art is not properly supported. In particular, the Examiner finds Sells teaches the majority of the limitations recited in independent claims 1 and 12, but finds Segal teaches the recited “broadcast analyst on-air” and “using a broadcast display interface.” Final Act. 9 (citing Segal ¶ 34, Figs. 1–5). The Examiner concludes it would have been obvious to incorporate these aspects from Segal into Sells “because users of known teleprompters were generally limited to viewing the passive content displayed in

conjunction with teleprompter prompts, as they had no way in which they could interact with any content so-displayed.” Final Act. 10–11 (citing Segal ¶ 6). This is merely a statement from Segal encapsulating alleged deficiencies in conventional systems that Segal’s invention allegedly addresses. *See* Segal ¶ 6.

Appellant contends the Examiner has not sufficiently supported the proposed combination. Appeal Br. 23; *see* Appeal Br. 26 (incorporating the arguments asserted with respect to claim 1 with respect to claim 12). In particular, Appellant argues “[t]here is no way that a teleprompter and a camera setup would assist the stated purpose of Sells, which is to assist a heavy machinery owner diagnose problems with the machinery and to order replacement parts for that equipment.” Appeal Br. 23. Appellant also contests the Examiner’s proposed reasoning because “Segal already describes basic interactive media content” but does not teach or suggest that Sells’ system for diagnosing a physical vehicle and ordering parts “should be somehow integrated into a newscast room and presented on a teleprompter.” Reply Br. 5.

In response to Appellant’s arguments, the Answer merely (1) explains that a motivation may be found in the references or the knowledge of an ordinarily skilled artisan, (2) finds Sells and Segal are analogous art to the invention, and (3) repeats the reasoning provided in the Final Action (i.e., quoting Segal’s statement of the problems Segal’s invention allegedly solves) without further explanation addressing Appellant’s arguments. *See* Ans. 26–27.

“A patent composed of several elements is not proved obvious merely by demonstrating that each element was, independently, known in the prior

art.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 401 (2007). Although it may “be necessary for a court to look to interrelated teachings of multiple patents,” in order to “facilitate review, this analysis should be made explicit.” *KSR*, 505 U.S. at 418. Accordingly, “rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006).

The Examiner does not explain why active content in conjunction with teleprompter prompts would have been beneficial or advantageous to one of ordinary skill in the art. Nor does the Examiner explain how modifying Sells’ system for diagnosing issues with a vehicle and ordering parts to include Segal’s teleprompter features would have been routine, predictable, or otherwise obvious to an ordinarily skilled artisan. The Examiner provides no other reason why one of ordinary skill in the art would have combined Sells’ and Segal’s teachings. In other words, the Examiner does not support a reason a person of ordinary skill in the art would have combined Sells’ interface for manipulating views or perspectives of a vehicle with a broadcast display interface.⁵

Our decision should not be construed to mean that we find the proposed combination deficient or that there is no valid reason for combining the relevant teachings from Sells, Segal, and Dengler. We cannot sustain the rejection because the Examiner’s stated reason to modify Sells is

⁵ We note that, to the extent the claimed broadcast display interface is only a label for the “interface” presented to the user and the “broadcast analyst on-air” is merely a label for the “viewer,” the Examiner may determine Sells teaches or suggests these elements even absent Segal’s teachings.

not supported by a rational underpinning. Instead, the rejection merely asserts the alleged result of combining the identified teachings without explaining how or why a person of ordinary skill in the art would have combined these teachings. On this record, without such support, we cannot sustain the rejection of claims 1–22 under 35 U.S.C. § 103.

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	References / Basis	Affirmed	Reversed
1–22	112(b)	Indefinite	1–22	
1, 2, 5, 6, 10–13, 16, 17, 21, 22	103	Sells, Segal, Dengler		1, 2, 5, 6, 10–13, 16, 17, 21, 22
3, 4, 7–9, 14, 15, 18–20	103	Sells, Segal, Dengler, Hertenstein		3, 4, 7–9, 14, 15, 18–20
Overall Outcome			1–22	

TIME PERIOD FOR RESPONSE

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. § 41.50(f).

AFFIRMED