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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte YASSER F. SYED and DONALD J. WESTER

Appeal 2019-001356
Application 14/285,131
Technology Center 2400

Before ELENI MANTIS MERCADER, NORMAN H. BEAMER, and GARTH D. BAER, *Administrative Patent Judges*.

MANTIS MERCADER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1, 3–10, and 12–19, 21, and 22, which are all the pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

THE INVENTION

Appellant's claimed invention is directed to providing video content and includes "receiving an encoding parameter associated with a first content transmission" in which the "encoding parameter can indicate a level of complexity to encode the first content transmission" and "selecting, based on the encoding parameter, a second content transmission" from which a "third content transmission" is generated (Abstract).

Independent claim 1, reproduced below with emphases added, is representative of the subject matter on appeal:

> 1. A method, comprising:
>
> receiving an encoding parameter associated with a first content transmission, wherein the encoding parameter indicates a level of complexity to encode the first content transmission;
>
> *requesting, based on the encoding parameter and an allocation of bandwidth* within a third content transmission, a second content transmission, wherein the second content transmission is encoded at a second bit rate that is different than a first bit rate of the first content transmission;
>
> receiving the second content transmission; and
>
> generating the third content transmission, wherein the third content transmission comprises the second content transmission and one or more of the first content transmission or a fourth content transmission.

[1] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies Comcast Cable Communications, LLC as the real party in interest (Appeal Br. 1).

(Claims Appendix (Appeal Br. 17)).

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is the following:

Name	Reference	Date
Zhang	US 6,795,506 B1	Sept. 21, 2004
Shumate	US 2010/0118697 A1	May 13, 2010

REJECTIONS

The Examiner made the following rejections:

Claims 1, 3–10, 12–19, 21, and 22 stand rejected under 35 U.S.C. § 101 because the claims do not amount to significantly more than the abstract idea of organizing and manipulating information through mathematical correlations. Final Act. 6.[2]

Claims 1, 3–8, 10, 12–17, 19, 21, and 22 stand rejected under 35 U.S.C. § 102(a)(1) as being anticipated by Zhang. Final Act. 8.[3]

Claims 9 and 18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Zhang and Shumate. Final Act. 17.

ISSUES[4]

The issues are whether the Examiner erred in finding that:

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[2] Although the heading of the rejection refers to claims 1–18 as being rejected under 35 U.S.C. § 101 (*see* Final Act. 6), the parties treat all claims as rejected. *See* Appeal Br. 7, Ans. 5.

[3] The heading of the rejection includes claim 23. Claim 23 was canceled in an after-final Amendment filed on January 16, 2018.

[4] In the Final Office Action, the Examiner interprets independent claim 19 under 35 U.S.C. § 112(f) (*see* Final Act. 2–3), and Appellant contests this interpretation. *See* Appeal Br. 6–7, Ans. 3–5. However, Appellant makes

1. claims 1, 3–10, and 12–19, 21, and 22 are directed to ineligible subject matter; and

2. Zhang discloses the limitation of:

> requesting, based on the encoding parameter and an allocation of bandwidth within a third content transmission, a second content transmission, wherein the second content transmission is encoded at a second bit rate that is different than a first bit rate of the first content transmission,

as recited in independent claim 1, and similarly recited in independent claims 10 and 19.

ANALYSIS

Except where indicated, we adopt the Examiner's findings in the Answer and Final Office Action and we add the following primarily for emphasis. We note that if Appellant failed to present arguments on a particular rejection, we will not unilaterally review those uncontested aspects of the rejection. *See Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential); *Hyatt v. Dudas*, 551 F.3d 1307, 1313–14 (Fed. Cir. 2008) (the Board may treat arguments Appellant failed to make for a given ground of rejection as waived).

Patent Eligibility

The Examiner determines claim 1 is patent ineligible under 35 U.S.C. § 101, because "the claim(s) as a whole, considering all claim elements both individually and in combination, do not amount to significantly more than an abstract idea of organizing and manipulating information through

---

no further argument regarding the anticipation rejection of claim 19, and claim 19 stands or falls with independent claim 1. Accordingly, we decline to consider the interpretation of claim 19 under 35 U.S.C. § 112(f), as such a finding is unnecessary regarding the patentability of claim 19.

mathematical correlations" (Final Act. 6; *see also Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 217 (2014) (describing the two-step framework "for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts")). Particularly, the Examiner finds the claims are directed to the

> abstract idea of a method of receiving, selecting, and generating [a] video bitstream by using an apparatus having a computer program product to perform the aforementioned functions which are nothing more than receiving and manipulating information through mathematical comparison and sorting

(Final Act. 7).

After the docketing of this appeal, the USPTO published revised guidance on the application of § 101 ("Guidance"). *See* USPTO's 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Memorandum"). Pursuant to the Guidance "Step 2A," the office first looks to whether the claim recites:

(1) Prong One: any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes); and

(2) Prong Two: additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h) (9th Ed., Rev. 08.2017 (Jan. 2018))).

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, does the Office then (pursuant to the Guidance "Step 2B") look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that are 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.

Pursuant to Step 2A, Prong One of the Guidance, the Office first looks to "evaluate whether the claim recites a judicial exception, *i.e.*, an abstract idea" (Memorandum, 84 Fed. Reg. at 54). Here, we agree with the Examiner that the claim is directed to "a method of receiving, selecting, and generating [a] video bitstream." We also agree with the Examiner that the generation of a video bitstream would involve mathematical concepts. However, under the Office's October 2019 Update: Subject Matter Eligibility (the "October 2019 Update") (available at https://www.uspto.gov/sites/default/files/documents/peg_oct_2019_update.pdf):

> [w]hen determining whether a claim recites a mathematical concept (i.e., mathematical relationships, mathematical formulas or equations, and mathematical calculations), examiners should consider whether the claim recites a mathematical concept or merely includes limitations that are based on or involve a mathematical concept. ***A claim does not recite a mathematical concept (i.e., the claim limitations do not fall within the mathematical concept grouping), if it is only based on or involves a mathematical concept.*** [footnote omitted] For example, ***a limitation that is merely based on or involves a mathematical concept described in the specification may not be sufficient to fall into this grouping, provided the mathematical concept itself is not recited in the claim.*** [footnote omitted]

October 2019 Update at 3, emphasis added. As claim 1 is based on, or involves a mathematical concept, but does not recite the mathematical concept, claim 1 does not meet the criterion of reciting mathematical concepts, and the claim does not recite a judicial exception (Memorandum, 84 Fed. Reg. at 52). Nor does claim 1 recite "certain methods of organizing human activity" or "mental processes," the remaining categories of the judicial exception (*Id.*).

As claim 1 does not recite one of the groupings of subject matter within the judicial exception, we need not proceed to Step 2A, Prong Two. However, we note that we agree with Appellant that the disclosure identifies a technological problem solved by the claimed invention when a content stream increases in complexity. *See* Appeal Br. 9, citing Spec. ¶ 18.

Accordingly, we reverse the Examiner's patent ineligibility rejection of claims 1, 3–10, 12–19, 21, and 22.

Anticipation

Appellant argues that

> [e]ven if, for the sake of argument, this second "bitstream" discloses "a second content transmission," it does not appear that the second "[bitstream]" is ever requested, let alone "based on [an] encoding parameter and an allocation of bandwidth" as claimed.

(Appeal Br. 15, citing Zhang 8:43–56). Appellant further contends that "Zhang is silent as to requesting content transmissions based on an 'allocation of bandwidth' as claimed" (Appeal Br. 15, citing Zhang 11:9–17).

We are not persuaded by Appellant's arguments. The Examiner finds, and we agree, that Zhang

> clearly discloses the request of one of the receivers for contents V2, V3 and V4, wherein the network device 92 remultiplexes V2, V3 and V4 from the multiplexed streams coming from 58, 60 and 62 based on the bandwidth requirements and bitrate information.

(Ans. 17, citing Zhang 10:65–11:19). The Examiner further finds, and we agree, that Zhang

> discloses reducing the bitrate of V2 and V3 in order to be able to transmit the multiplexed compressed bitstream. This reduction in bitrate of V2 or V3 does not automatically happen. This is based on the requirement of the receiver side. Fig. 5A [ ] shows the network device 92 which constitutes a rate controller 409 which sends back the request of varying the bitrate of the incoming streams based on the requirement of the receiver that the scheduler 411 is scheduling the multiplexed data for.

(Ans. 17, citing Zhang 11:9–17, Fig. 5A, 21:52–22:2).

We find no error in the Examiner's detailed findings, and Appellant does not address the Examiner's findings. Accordingly, we sustain the Examiner's anticipation rejection of independent claim 1, as well as independent claims 10 and 19 commensurate in scope and not separately argued, and the rejections of dependent claims 3–9, and 12–18, 21, and 22 not separately argued. *See* Appeal Br. 14–15.

CONCLUSION

The Examiner erred in finding that claims 1, 3–10, and 12–19, 21, and 22 are directed to ineligible subject matter.

The Examiner did not err in finding that Zhang discloses the limitation of:

> requesting, based on the encoding parameter and an allocation of bandwidth within a third content transmission, a second content transmission, wherein the second content transmission

> is encoded at a second bit rate that is different than a first bit rate of the first content transmission,

as recited in independent claim 1, and similarly recited in independent claims 10 and 19.

DECISION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 3–10, 12–19, 21, 22	101	Eligibility		1, 3–10, 12–19, 21, 22
1, 3–8, 10, 12–17, 19, 21, 22	102(a)(1)	Zhang	1, 3–8, 10, 12–17, 19, 21, 22	
9, 18	103	Zhang, Shumate	9, 18	
Overall Outcome			1, 3–10, 12–19, 21, 22	

The Examiner's decision is affirmed because we have affirmed at least one ground of rejection with respect to each claim on appeal. *See* 37 C.F.R. § 41.50(a)(1) (2017).

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)(1)(iv).

AFFIRMED