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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CHRISTOPHER STONE, FRANCES BEVAN,
and MICHAEL REKSTAD

Appeal 2018-002791
Application 13/804,849
Technology Center 2100

Before ERIC S. FRAHM, BETH Z. SHAW,
and NORMAN H. BEAMER, *Administrative Patent Judges*.

BEAMER, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–4, 6, 22–24, 27–29, 31, 32, and 34–38. Claims 5, 7–21, 25, 26, 30, and 33 are cancelled. We have jurisdiction over the pending rejected claims under 35 U.S.C. § 6(b).

We reverse.

¹ We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant states that it believes the real party in interest is Comcast Cable Communications, LLC. (Appeal Br. 3.)

CLAIMED SUBJECT MATTER

Appellant's disclosed and claimed invention is directed to encoded Multiple User Interface (UI) states (for example, on-screen TV program guides) containing images of UI states and metadata associating an encoded UI state with other navigationally related encoded UI states, with portions of encoded UI states communicated to user devices. (Abstr.; Spec. ¶ 1.) Independent claims 1, 23, and 38, reproduced below, are illustrative of the claimed subject matter:

1. A method, comprising:

generating, by a computing system, a first plurality of images, each image corresponding to a state of a first plurality of states of a user interface;

communicating, by the computing system, data comprising the first plurality of images and metadata associating each image of the first plurality of images with a state of the first plurality of states;

receiving an indication of a request, from a user device, for a first state of the first plurality of states, wherein the indication of the request comprises at least a portion of the metadata;

in response to the indication of the request for the first state of the first plurality of states, generating, by the computing system, a second plurality of images, each image of the second plurality of images corresponding to a state of a second plurality of states; and

communicating, by the computing system, data comprising at least one of the second plurality of images.

23. A method, comprising:

receiving, by a computing system, an indication that a first state of a user interface has expired, wherein the first state of the user interface is associated with a user device;

transmitting, to the user device and in response to receiving the indication that the first state of the user interface has expired, data corresponding to a second state of the user interface; and

responsive to receiving the indication that the first state of the user interface has expired and prior to receiving an indication that the user device requested one or more states of the user interface that are navigationally related to the second state, generating one or more images or videos, wherein each of the one or more images or videos corresponds to a state of the user interface that is navigationally related to the second state.

38. A method, comprising:

transmitting, by a first computing device and to a second computing device, a first user interface state;

transmitting, by the first computing device and to a third computing device, a request for a first plurality of user interface states, wherein each state of the first plurality of user interface states is navigationally related to the first user interface state;

determining, by the first computing device, that the first user interface state has expired;

in response to determining that the first user interface state has expired, transmitting, by the first computing device and to the second computing device, a second user interface state of the first plurality of user interface states; and

in response to determining that the first user interface state has expired, transmitting, by the first computing device and to the third computing device, a request for a second plurality of user interface states, wherein each user interface state of the second plurality of user interface states is navigationally related to the second user interface state.

(Appeal Br. 13, 14, 16–17 (Appendix A).)

REJECTIONS

The Examiner rejected claims 1–4, 6, 22, 31, 35, and 37 under 35 U.S.C. § 103(a) as being unpatentable over Ludvig et al. (US 7,091,968 B1, issued Aug. 15, 2006) and Britto et al. (US 8,832,184 B1, issued Sept. 9, 2014). (Final Act. 2–11.)

The Examiner rejected claims 23, 24, 27, and 29 under 35 U.S.C. § 103(a) as being unpatentable over Ludvig and Allegrezza et al. (US 8,650,601 B2, issued Feb. 11, 2014). (Final Act. 11–17.)

The Examiner rejected claim 28 under 35 U.S.C. § 103(a) as being unpatentable over Ludvig, Allegrezza, and Wasserman (US 7,814,512 B2, issued Oct. 12, 2010). (Final Act. 17–18.)

The Examiner rejected claim 32 under 35 U.S.C. § 103(a) as being unpatentable over Ludvig, Britto, and Wasserman. (Final Act. 18–19.)

The Examiner rejected claim 34 under 35 U.S.C. § 103(a) as being unpatentable over Ludvig, Britto, and Allegrezza. (Final Act. 19–20.)

The Examiner rejected claim 36 under 35 U.S.C. § 103(a) as being unpatentable over Ludvig, Britto, and Babic (US 2011/0296474 A1, pub. Dec. 1, 2011). (Final Act. 20–22.)

The Examiner rejected claim 38 under 35 U.S.C. § 103(a) as being unpatentable over Ludvig, Babic, and Allegrezza. (Final Act. 22–25.)

ISSUES ON APPEAL

Appellant's arguments present the following issues:²

Issue One: Whether the Examiner erred in finding the combination of Ludvig and Britto would have taught or suggested the limitations of independent claim 1. (Appeal Br. 5–8.)

Issue Two: Whether the Examiner erred in finding the combination of Ludvig and Allegrezza would have taught or suggested the limitations of independent claim 23. (Appeal Br. 8–9.)

Issue Three: Whether the Examiner erred in finding the combination of Ludvig, Babic, and Allegrezza would have taught or suggested the limitations of independent claim 38. (Appeal Br. 10–11.)

ANALYSIS

Issue One

In rejecting claim 1, the Examiner relies on the disclosure in Ludvig of delivering multiple interactive program guides, covering, for example, hundreds of channels over a 24-hour period, which are collectively broadcast to all viewers in one or more multiplexed streams, in which an individual program guide is selected for decoding and display in response to a unique program identification code generated by viewer control. (Final Act. 2–5; Ludvig Abstr., Figs. 5A, 5B, 5C, 6, 5:63–65, 7:57–65, 8:11–15.) The Examiner further relies on the disclosure in Britto of reducing the response

² Rather than reiterate the arguments of Appellant and the findings of the Examiner, we refer to the Appeal Brief (filed July 31, 2017) (“Appeal Br.”); the Reply Brief (filed Jan. 22, 2018) (“Reply Br.”); the Final Office Action (mailed Aug. 4, 2016) (“Final Act.”); and the Examiner’s Answer (mailed Nov. 22, 2017) (“Ans.”) for the respective details.

delay of a state-based client-server application using a server-side cache to pre-fetch and store data that may follow a current state of the application. (Final Act. 5–6; Britto Abstr., 4:33–40, claim 2.)

Appellant notes that the Examiner finds “Ludvig do[es] not explicitly teach that the second plurality of images was generated in response to the request for the first state of the first plurality of states.” (Appeal Br. 6, citing Final Act. 5.) Appellant further argues the Examiner errs in finding the combination of Britto with Ludvig teaches or suggests this requirement, because:

In Ludvig, **all** of the available IPG pages are generated and encoded. All of the encoded sequences are then transmitted to the subscriber equipment. Thus, Ludvig would not be modified to generate further sequences **based on a data request**, as the Office appears to suggest. In Ludvig, all of the available IPG pages **have already been transmitted**, and no further data request is necessary.

Britto prefetches data to avoid a delay caused by a server trip. However, in Ludvig, when a subscriber changes pages in the IPG, no server trip is needed as the data has already been transmitted to the subscriber equipment. The system of Ludvig does not need to generate a new IPG page when a new page of the guide is accessed. Rather, the subscriber equipment in Ludvig simply decodes a different PID from the received data.

The Office’s proposed combination would not result in a “reduction of delay between a user action and an associated update of a user interface,” as the Office suggests, because the proposed combination would actually **increase** the amount of transmissions, thus increasing the number of delays, for updating the user interface in Ludvig.

(Appeal Br. 6–7.)

In supporting the rejection, the Examiner finds that the combination is motivated because it provides a “reduction of delay between a user action

and an associated update of a user interface,” and “a more reliable storage system that do[es] not overload or depend on the subscriber device which could affect the user experience. . . .” (Final Act. 6; Ans. 4.) However, as stated by Appellant as quoted above, the proposed combination would increase delay. (Appeal Br. 7.) In addition, as described above, the program guides of Ludvig are constantly being streamed to the user device, and selectively decoded based on the program identification code. (Ludvig Abstr. 5:63–65, 7:57–65, 8:11–15.) Therefore, the issue of storage system reliability and capacity is not a motivating factor when considering any modification of Ludvig. (Appeal Br. 6.)

The Examiner also relies on the disclosure in Ludvig of a provision for multiple transport streams to accommodate a large number of program guides, finding in light of that disclosure “it is not a must to be all downloaded to the user system.” (Ans. 3, citing Ludvig 11:1–21.) However, the Examiner does not explain the significance of this observation and we are not persuaded it refutes Appellant’s argument that all program guides are transmitted at once, eliminating the motivation to combine Ludvig with Britto.

Accordingly, we agree with Appellant that the Examiner has not made out a *prima facie* case of obviousness, and we do not sustain the Examiner’s obviousness rejections of independent claim 1 as obvious over Ludvig and Britto. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

We also do not sustain the Examiner’s obviousness rejections of claims 2–4, 6, 22, 31, 35, and 37 over Ludvig and Britto, of claim 32 over Ludvig, Britto, and Wasserman, of claim 34 over Ludvig, Britto, and Allegrezza, and of claim 36 over Ludvig, Britto, and Babic, which claims

depend, directly or indirectly, from claim 1, and which additional references (Wasserman, Allegrezza, and Babic) are not relied on for the limitations of claim 1.

Issue Two

In rejecting claim 23, the Examiner relies on the above described disclosures in Ludvig, and also the disclosure in Allegrezza of a video on demand management system that moves higher demand content to storage devices near to subscribers, and moves content further away after the content has aged for a predetermined time. (Final Act. 12–14; Allegrezza Abstr., 2:29–43.)

Appellant notes the Examiner finds Ludvig does not explicitly teach the claim 23 requirement of “receiving . . . an indication that a first state of a user interface has expired,” or “transmitting . . . in response . . . data corresponding to a second state of the user interface,” and argues the Examiner errs in finding Allegrezza in combination with Ludvig satisfies those requirements. (Appeal Br. 8, citing Final Act. 12.) We agree with Appellant. Although Allegrezza generally discloses the idea of relocating video content based on monitoring its “aging,” the Examiner does not sufficiently explain how the combination teaches or suggests the specific claim requirements at issue. (*See* Ans. 5.)

Accordingly, the Examiner has not made out a *prima facie* case of obviousness, and we do not sustain the Examiner’s obviousness rejection of independent claim 23 as obvious over Ludvig and Allegrezza.

We also do not sustain the Examiner’s obviousness rejections of claims 24, 27, and 29 over Ludvig and Allegrezza, and of claim 28 over Ludvig, Allegrezza, and Wasserman, which claims depend, directly or

indirectly, from claim 23, and which additional reference (Wasserman) is not relied on for the limitations of claim 23.

Issue Three

In rejecting claim 38, the Examiner relies on the above described disclosures in Ludvig and Allegrezza, and also the disclosure in Babic of facilitating video workflow using a “content delivery network” configured in a hierarchy so that a client device can successively request data from an edge cache, a parent cache, or an origin content server, depending on availability. (Final Act. 22–25; Babic Abstr., ¶ 47.)

Appellant argues the Examiner errs because one of ordinary skill in the art would not have combined Babic with Ludvig, for the same reasons as discussed above in regard to the combination of Ludvig with Britto — the system of Ludvig generates and encodes all available program guides, and therefore there would be no need for the hierarchical caching techniques of Babic. (Appeal Br. 11.) We agree with Appellant for the same reasons as discussed above.

Accordingly, the Examiner has not made out a *prima facie* case of obviousness, and we do not sustain the Examiner’s obviousness rejection of independent claim 38 as obvious over Ludvig, Babic, and Allegrezza.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–4, 6, 22, 31, 35, 37	103	Ludvig, Britto		1–4, 6, 22, 31, 35, 37
23, 24, 27, 29	103	Ludvig, Allegrezza		23, 24, 27, 29

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28	103	Ludvig, Allegrezza, Wasserman		28
32	103	Ludvig, Britto, Wasserman		32
34	103	Ludvig, Britto, Allegrezza		34
36	103	Ludvig, Britto, Babic		36
38	103	Ludvig, Babic, Allegrezza		38
Overall Outcome				1-4, 6, 22-24, 27-29, 31, 32, 34-38

REVERSED