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BEFORE THE PATENT TRIAL AND APPEAL BOARD
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Ex parte ESPEN BERGER, PASCAL BÜHLER,
and JAN ASLE KROKNES
_____

Appeal 2018-001368
Application 13/113,501
Technology Center 2600
_____

Before MELISSA A. HAAPALA, NABEEL U. KHAN, and
SHARON FENICK, *Administrative Patent Judges.*

FENICK, Administrative Patent Judge.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the
Examiner's decision to reject claims 1–5, 7–9, 11, 12 and 14–18. *See*
Appeal Br. 2.[2] We have jurisdiction under 35 U.S.C. § 6(b)(1).

We AFFIRM.

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[1] We use the word Appellant to refer to "applicant" as defined in 37 C.F.R.
§ 1.42. Appellant identifies the real party in interest as Cisco Technology,
Inc. Appeal Brief ("Appeal Br.," filed Apr. 26, 2017) 1.
[2] This Decision refers to Appellant's Appeal Brief, the Examiner's Final
Office Action ("Final Act.," mailed Sept. 29, 2016) and Answer ("Ans.,"
mailed Aug. 23, 2017), and the original Specification ("Spec.," filed May
23, 2011).

CLAIMED SUBJECT MATTER

Appellant's specification describes video conferencing among video conferencing clients, each connected to a central unit (the "media switching conference server" or "MSCS") over a communication network. Spec. 1:14–16, 5:4–13; Fig. 1. A client announces to the MSCS which video resolutions of media streams are available from the client; the MSCS publicizes the availability of these streams and requests the streams subscribed to by other clients. *Id.* 5:26–6:4, 6:19–22, 7:19–25. A media stream received at the MSCS is relayed to other clients who have subscribed to that media stream. *Id.* 8:9–18. A client can subscribe or unsubscribe to media streams depending on the needs of the client. *Id.* 10:5–7, 10:22–31, 11:32–12:10.

Claim 1, reproduced below with certain limitations italicized for emphasis, is illustrative of the claimed subject matter:

1. A method comprising:

establishing connections, at a server, to at least two client devices using a call control protocol, the call control protocol negotiating video formats and connection information for sending and receiving media streams;

receiving information from a first client device at the central server, the information comprising meta-data describing different media streams having different qualities that the first client device is configured to transmit;

transmitting the information received from the first client device to a second client device, wherein the second client device determines, in response to receiving the information on the different media streams the first client device is configured to transmit, a quality, wherein the quality includes resolution or size, and media stream from the available media streams from the first client device the second device will subscribe to;

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receiving a first subscribe message from the second client device at the central server, subscribing to at least one available media stream from the first client device;

in response to receiving the first subscribe message from the second client device, transmitting, by the central server, a message instructing the first client device to start transmitting one or more media streams subscribed to by the second client device, the message including multiple video resolutions at which the first client device is to transmit the one or more media streams based on capabilities of the second client device;

receiving, by the server, the one or more media streams subscribed to by the second client device from the first client device;

transmitting, by the server, the one or more media streams subscribed to by the second client device to the second client device;

receiving, by the server, an unsubscribe message from the second client device, unsubscribing to at least one of the media streams subscribed to by the second client device;

receiving, by the server, a second subscribe message from the second client device, subscribing to at least one other available media stream from the first client device; and

in response to receiving the second subscribe message and the unsubscribe message from the second client device, *transmitting, by the central server, a message instructing the first client device to start transmitting media streams subscribed to by the second client device, and to stop transmitting media streams unsubscribed to by the second client device*.

REFERENCE

The prior art relied upon by the Examiner is:

Name	Reference	Date
Johansen et al. ("Johansen")	WO 2005/048600 A1	May 26, 2005
Luo et al. ("Luo")	US 2007/0086366 A1	Apr. 19, 2007
Moore et al. ("Moore")	US 2007/0294346 A1	Dec. 20, 2007
Punj et al. ("Punj")	US 2005/0237931 A1	Oct. 27, 2005

REJECTIONS

Claims 1–5, 7, 9, 11, 12, 17, and 18 are rejected under pre–AIA 35 U.S.C. § 103(a) as being unpatentable over Johansen, Luo, and Moore. Final Act. 2–9.

Claims 8 and 14–16 are rejected under pre–AIA 35 U.S.C. § 103(a) as being unpatentable over Johansen, Luo, Moore, and Punj. Final Act. 10–13.

OPINION

Claims 1–5 and 7

Appellant asserts several errors in the Examiner's findings relating to three limitations of claim 1: (a) "receiving a first subscribe message from the second client device at the central server, subscribing to at least one available media stream from the first client device"; (b) "receiving, by the server, a second subscribe message from the second client device, subscribing to at least one other available media stream from the first client device"; and (c) "transmitting, by the central server, a message instructing the first client device to start transmitting media streams subscribed to by the second client device, and to stop transmitting media streams unsubscribed to by the second client device." Appeal Br. 11–15.

First disputed limitation

For the teaching of the first disputed claim limitation of claim 1 ("receiving a first subscribe message . . ."), the Examiner finds Johansen discloses a MCU (Multipoint Control Unit) receiving media streams from different audiovisual terminals, formulating a media plan based on the capabilities of the endpoints, and propagating media from sender to receiver. Final Act. 3–4 (citing Johansen 2:6–12). The Examiner further finds that Johansen discloses a hybrid conference, in which each endpoint can select

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from among incoming video streams for local view. Ans. 15 (citing

Johansen 5:1–31). The Examiner finds that "[i]t is known in the art that for

an endpoint to join an audio/video conference, it requires subscription" and,

further, that Luo teaches a subscribe request message sent when a member

source subscribes to a stream. *Id.* at 15–16 (citing Luo ¶ 63).

Appellant argues that Johansen teaches that the MCU formulates a

media plan, and therefore, "in Johansen, the MCU does not receive a

subscribe message from the second client device subscribing to a media

stream from the first device because the MCU determines the media plan."

Appeal Br. 11–12. We are unpersuaded by this argument. We agree with

the Examiner that Johansen teaches an endpoint subscribing and

unsubscribing from specific media streams. In particular, Johnansen

dicloses that a hybrid conference could be one in which "audio is mixed at

the MCU and each endpoint selects and decodes one or more incoming

video stream for local view." Johansen, 5:29–31. We further agree with the

Examiner that Luo discloses a client ("member node" or "member source" in

Luo) that can subscribe or unsubscribe to any stream at any time during the

videoconference, with a "subscription/unsubscription request" sent to the

originating member node for the relevant stream. *See* Ans. 15–16 (citing

Luo ¶ 63). Thus, we agree with the Examiner that the combination of cited

elements from Luo and Johansen would have taught or suggested this first

disputed claim limitation to one of ordinary skill in the art.

Second disputed limitation

For the teaching of the second disputed claim limitation of claim 1

("receiving, by the server, a second subscribe message from the second

client device, subscribing to at least one other available media stream from

the first client device"), the Examiner cites Luo's disclosure that member

sources can unsubscribe and resubscribe to streams in the video conference. Final Act. 6 (citing Luo ¶ 63).

Appellant's first argues that Luo is deficient because "[t]he audio and video streams of Luo are not different resolutions or sizes." Appeal Br. 14. However, this argument relies on an assumption that the "at least one other available media stream" referred to in this claim limitation as the subject of the second subscribe message must have a different resolution or size from the "at least one available media stream," which is the subject of the claimed first subscribe message. We disagree that the claim contains such a requirement. While the claim requires that the "different media streams"[3] have "different qualities," the claim does not require that each of the "different media streams" be of a different resolution and size than each other one of the "different media streams." The claim requires that the second client device determine both a quality (including resolution or size) and a media stream from among "available media streams"; however, these determinations are not specifically linked to the first subscribe message or the second subscribe message, or the "at least one available media stream" and "at least one other available media stream," which are the subjects of those subscription requests. Additionally, this determination is not made a second time, so the claim does not require that a second determination is made, or that a second quality, different from the first, would be the result of such a second determination.

Appellant next argues that Luo only teaches subscribing or unsubscribing to the same stream, namely the audio portion of the stream.

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[3] We note that there is no description in the claim of what the relationship is between "different media streams."

Appeal Br. 14. We are not persuaded by this argument. Luo discusses unsubscribing to an audio stream as an example; however, Luo also discloses that "[a] member source can subscribe or unsubscribe to <u>any stream</u> at any time during the video conference." Luo ¶ 63 (emphasis added). Thus, we agree with the Examiner that Luo teaches a client subscribing or unsubscribing to more than just one stream. Additionally, we note that the different available media streams of different qualities are found by the Examiner to be taught by Johansen (Final Act. 3), and so, even were Luo deficient in this respect, upon considering what the combined teachings of the references would have suggested to one of ordinary skill in the art, we agree with the Examiner's finding that the disputed claim limitation is taught by the prior art combination.

Third disputed limitation

For the teaching of the third disputed claim limitation of claim 1 ("transmitting, by the central server, a message instructing the first client device to start transmitting media streams subscribed to by the second client device, and to stop transmitting media streams unsubscribed to by the second client device"), the Examiner cites Luo's description of clients subscribing or unsubscribing to any stream at any time, and Moore's disclosure of sending a command to a node transmitting a video stream that is not being used to stop transmitting. Final Act. 6–7 (citing Luo ¶ 63; Moore ¶ 6.)

Appellant argues that Moore's conference server "may instruct a non-active participant to stop communicating video" but "does not act because the second client device has unsubscribed." Appeal Br. 15. We do not find reversible error in light of this argument because Appellant attacks the references individually rather than the combined teachings of the prior art as

a whole. One cannot show non-obviousness by attacking references individually where the rejection is based on a combination of references. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). Appellant's argument is premised on what Appellant contends Moore teaches individually, and not the combined teachings of the cited portions of the references (Luo and Moore) and what the combined teachings would have suggested to one of ordinary skill in the art.

Conclusion – Claims 1–5 and 7

Having considered all of Appellant's arguments with respect to claim 1 and found no reversible error in the Examiner's rejection, we sustain the Examiner's rejection of claim 1. Claims 2–5 and 7 are argued with claim 1, and we sustain the rejection of these claims as well.

Claims 9, 11, 12, 17, and 18

Claims 9, 11, 12, 17, and 18 contain substantially similar limitations to claim 1. Appellants present arguments for these claims that mirror the arguments addressed for claim 1. Appeal Br. 16–20, 22–26. For the same reasons provided above, we find no reversible error in the Examiner's rejections of these claims, and we sustain these rejections.

Claim 14

Appellant presents an argument for claim 14 that mirrors the first argument one discussed above with reference to claim 1. Appeal Br. 21. We are unpersuaded by this argument for the reasons discussed above.

Appellant additionally argues that the Examiner errs in finding that Punj, with Johansen, Luo, and Moore, teach "performing an optimization for the at least one available media stream, and transmit a second subscribe message to the server including a resolution change for the optimization."

Id. at 21–22. In particular, Appellant argues that "[t]he bandwidth utilization of Punj is not related to a second subscribe message to the server including a resolution change for the optimization." *Id.* at 22. We are not persuaded by this argument. We agree with the Examiner that Luo discloses that a user can decide to change the quality of the stream during a video conference. Ans. 25; *see* Luo ¶ 64. We further agree Punj teaches renegotiating bandwidth and transmitting messages regarding resolution changes for optimizing a media stream (participants can ask to lower their video bandwidths). Final Act. 12; Ans. 24–25; *see* Punj ¶¶ 416, 417, 448. Thus, we agree with the Examiner that the cited combination of references would have taught or suggested this disputed limitation of claim 14.

Appellant additionally argues that Punj teaches away from the use of a conferencing bridge or MCU. Appeal Br. 22. Appellant cites one paragraph of Punj (paragraph 533[4]) in support of this argument; however, this paragraph does not characterize the entire disclosure of Punj, or relate to the paragraphs cited by the Examiner in the Final Action. *See* Final Act. 12 (citing Punj ¶¶ 416, 417, 448, 451). We note Punj discloses a hub and spoke conferencing arrangement. Punj ¶¶ 183–185, Figure 10. A teaching away argument requires more than the disclosure of a different configuration. A teaching away requires a reference to actually criticize, discredit, or otherwise discourage the claimed solution. *See In re Fulton,* 391 F.3d 1195, 1201 (Fed. Cir. 2004).

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[4] Appellant quotes from Punj and cites to paragraph 445, however we believe this to be a typographical error as the quotation given is from paragraph 533 of Punj and paragraph 445 does not relate to the subject matter of the quotation provided.

Having considered all of Appellant's arguments with respect to claim 14 and found no reversible error in the Examiner's rejection, we sustain the Examiner's rejection of claim 14.

Claims 8, 15, 16

No arguments were presented for claims 8, 15, and 16. Arguments regarding independent claims from which these claims depend, directly or indirectly, have been addressed above and we have determined no reversible error.

CONCLUSION

We affirm the Examiner's rejections of claims 1–5, 7–9, 11, 12 and 14–18 as unpatentable under 35 U.S.C. § 103.

More specifically,

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–5, 7, 9, 11, 12, 17, and 18	103	Johansen, Luo, and Moore	1–5, 7, 9, 11, 12, 17, and 18	
8 and 14–16	103	Johansen, Luo, Moore, and Punj	8 and 14–16	
Overall Outcome:			1–5, 7–9, 11, 12, 14–18	

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. § 1.136(a)(1)(iv).

AFFIRMED