



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.
13/629,216	09/27/2012	Rajah K.V.R. Kalipatnapu	062891.3862	3243
86846	7590	07/14/2017	EXAMINER	
Baker Botts L.L.P./Cisco Systems			BROWN, CHRISTOPHER J	
2001 Ross Avenue			ART UNIT	
SUITE 700			PAPER NUMBER	
Dallas, TX 75201			2439	
			NOTIFICATION DATE	
			DELIVERY MODE	
			07/14/2017	
			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):

PTOmail1@bakerbotts.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RAJAH K.V.R. KALIPATNAPU, RAJESH VELLIYATT,
KRUTARTH M. SHAH, MURTHY V. ATMAKURI,
and KHOA T. TRAN

Appeal 2017-001321
Application No. 13/629,216¹
Technology Center 2400

Before JOSEPH L. DIXON, MARC S. HOFF, and SCOTT B. HOWARD,
Administrative Patent Judges.

HOFF, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from a Final Rejection of claims 27–52.² We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

Appellants' invention is a system for optimizing bandwidth during a video conference. A plurality of multipoint conference units (MCUs)

¹ The real party in interest is Cisco Technology, Inc.

² The non-statutory double patenting rejection of claims 27–52 is considered to have been overcome by the Terminal Disclaimer filed June 11, 2015 and approved August 18, 2015.

facilitates video conferences between two or more participants, and are also able to facilitate cascaded video conferences comprising participants managed by two or more of the MCUs. A plurality of endpoints participate in a video conference. Each endpoint is able to establish a conference link with a selected one of the MCUs, to generate a plurality of video streams and a corresponding plurality of audio streams, to transmit the generated video streams and the generated audio streams on the conference link, to receive a plurality of video streams and audio streams, to present the received audio streams using a plurality of speakers, and to display the received video streams using a plurality of monitors. *See Spec. 3.*

Claim 27 is exemplary of the claims on appeal:

27. A system for optimizing bandwidth during a video conference comprising:

a plurality of multipoint conference units (MCUs) each operable to facilitate video conferences between two or more participants, the MCUs further operable to facilitate cascaded video conferences comprising participants managed by two or more of the MCUs;

a plurality of endpoints participating in a video conference, each endpoint operable to establish a conference link with a selected one of the MCUs, to generate a plurality of video streams and a corresponding plurality of audio streams, to transmit the generated video streams and the generated audio streams on the conference link, to receive a plurality of separate spatially consistent video streams and a plurality of audio streams, to present the received audio streams using a plurality of speakers, and to display the received video streams using a plurality of monitors;

a controlled MCU of the MCUs managing a first set of the endpoints, the controlled MCU operable:

to receive a first set of available video streams comprising the generated video streams from each of the first set of endpoints;

to select X potential video streams out of the first set of available video streams, wherein X is less than or equal to N and N is the maximum number of active video streams that any endpoint is able to display concurrently; and

to transmit the X potential video streams to a master MCU of the MCUs; and the master MCU managing a second set of the endpoints, the master MCU operable:

to receive a second set of available video streams comprising the generated video streams from each of the second set of endpoints and the potential video streams from the controlled MCU;

to select active video streams out of the second set of available video streams, the active video streams comprising Y primary video streams and M alternate video streams, wherein Y is less than or equal to N;

to determine required ones of the active video streams for delivery to one or more of the first set of the endpoints; and

to transmit the required ones of the active video streams to the controlled MCU.

The Examiner relies upon the following prior art in rejecting the claims on appeal:

Eshel	US 2006/0223120 A1	Oct. 19, 2006
Shaffer	US 6,775,247 B1	Aug.10, 2004
Yim	US 2007/0285501 A1	Dec. 13, 2007

Claims 27–35 and 37–52 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yim and Shaffer.

Claim 36 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Yim, Shaffer, and Eshel.

Throughout this decision, we make reference to the Appeal Brief (“App. Br.,” filed Nov. 19, 2015), the Reply Brief (“Reply Br.,” filed Oct.

28, 2016), and the Examiner's Answer ("Ans.," mailed Aug. 29, 2016) for their respective details.

ISSUE

Does the combination of Yim and Shaffer teach or fairly suggest a plurality of endpoints operable to receive a plurality of separate spatially consistent video streams?

ANALYSIS

The independent claims under appeal (27, 37, 42, 47, and 52) recite, inter alia, that each of the "plurality of endpoints" is operable "to receive a plurality of separate spatially consistent video streams" and "to display the received video streams using a plurality of monitors."

Appellants argue that Yim teaches that "[a]udio and video information received by the master server is combined into a composite audio and video stream for the outside client and the cluster node server." App. Br. 14, citing Yim ¶ 7 (emphasis omitted). The Examiner responds that Yim teaches that multiple video streams are created and transmitted from a plurality of transmitting clients. Ans. 2, citing Yim ¶¶ 35, 36. "Yim teaches that despite combination for transmission, that these created separate video streams are received by a second plurality of receiving client devices. They are viewed and heard spatially and consistently separate." Ans. 2. "Yim also teaches that one of the multiple video streams may be selected to be the primary window feed displayed above the other video streams." Ans. 3, citing Yim ¶ 33.

We disagree with the Examiner, and agree with Appellants that Yim fails to teach a plurality of "endpoints," which "represent telecommunications equipment that supports participation in video

conferences” and “may include any suitable video conferencing equipment” (Spec. 6–7), that are operable to receive a plurality of separate spatially consistent video streams.

We find that Yim teaches “outside clients,” who receive audio and video from a master node server, and “cluster node clients,” who receive audio and video from a cluster node server. Yim ¶ 7.

Audio and video information received by the master server is combined into a composite audio and video stream for the outside client and the cluster node server Finally, the composite audio and video stream received by the cluster node server is transmitted to the cluster node clients.

Id.

The master server 102 combines the audio/video streams received from outside clients 104 and cluster node servers 122 into a composite audio/video stream. In one embodiment, the videos are downsampled and combined to form a composite image In one embodiment, the composite audio/video stream is customized for each outside client and cluster node server in accordance with their preferences and commands.

Yim ¶ 36.

Yim, thus, teaches that both outside clients and cluster node clients, which correspond to the “endpoints” recited in Appellants’ claims, receive a composite audio and video stream (singular) from the master server, in which the (plurality of) videos transmitted to the master server are downsampled and combined to form a composite image (singular). In one embodiment, the composite stream (singular) is customized for each outside client and cluster node server. Such customization does not alter the fact that a *single*, composite stream is received by outside clients and (ultimately) cluster node clients.

The Examiner’s finding that Yim teaches “separate created video streams . . . received by a second plurality of receiving client devices,” such separate streams being “viewed and heard spatially and consistently separate,” is erroneous. *See* Ans. 2. The Examiner has not identified any portion of Yim in support of these findings. As stated *supra*, we find that Yim teaches that clients receive only a single video stream.

The Examiner points out that the independent claims recite endpoints operable to receive multiple video streams, and asserts that this language means that the endpoints need only “have the capability of performing the act of receiving.” Ans. 3. The Examiner does not identify any teaching in Yim, however, tending to show that Yim’s outside clients or cluster node clients have the capability to receive a plurality of separate spatially consistent video streams. In contrast, we agree with Appellants that Yim teaches outside clients 104 and cluster node clients 130 receiving a single audio/video stream. *See* Yim ¶ 36.

We find that the Examiner erred in rejecting independent claims 27, 37, 42, 47, and 52 under 35 U.S.C. § 103(a) as being unpatentable over Yim and Shaffer. We do not sustain the Examiner’s rejection of those claims, as well as dependent claims 28–35, 38–41, 43–46, and 48–51.

CLAIM 36

Claim 36 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Yim, Shaffer, and Eshel. Final Act. 9. Appellants make no argument in the Appeal Brief in favor of the patentability of claim 36.³ Appellants argue generally that the rejection of claims 27-52 is in error in

³ In contrast, Appellants state that “the Examiner’s rejections of Claims 27-35 and 37-52 are improper and the Board should reverse them.” App. Br. 12.

Appeal 2017-001321
Application No. 13/629,216

the Reply Brief, but make no remarks concerning claim 36 specifically. *See* Reply Br. 1, 2.

Because Appellants present no argument whatever concerning the rejection of claim 36, we sustain *pro forma* the Examiner's § 103(a) rejection of claim 36 over Yim, Shaffer, and Eshel.

CONCLUSION

The combination of Yim and Shaffer does not teach or fairly suggest a plurality of endpoints operable to receive a plurality of separate spatially consistent video streams.

ORDER

The Examiner's decision to reject claim 36 under 35 U.S.C. § 103(a) is affirmed.

The Examiner's decision to reject claims 27–35 and 37–52 under 35 U.S.C. § 103(a) is reversed.

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-IN-PART