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EXAMINER	
ROSWELL, MICHAEL	

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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.

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EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. *90/019,523* .

PATENT UNDER REEXAMINATION *7987285* .

ART UNIT *3992* .

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Order Granting Request For Ex Parte Reexamination	Control No. 90/019,523	Patent Under Reexamination 7987285	
	Examiner MICHAEL ROSWELL	Art Unit 3992	AIA (FITF) Status No

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

The request for *ex parte* reexamination filed 05/24/2024 has been considered and a determination has been made. An identification of the claims, the references relied upon, and the rationale supporting the determination are attached.

Attachments: a)☐ PTO-892, b)☑ PTO/SB/08, c)☐ Other: ____

1. ☑ The request for *ex parte* reexamination is GRANTED.

RESPONSE TIMES ARE SET AS FOLLOWS:

For Patent Owner's Statement (Optional): TWO MONTHS from the mailing date of this communication (37 CFR 1.530 (b)). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).**

For Requester's Reply (optional): TWO MONTHS from the **date of service** of any timely filed Patent Owner's Statement (37 CFR 1.535). **NO EXTENSION OF THIS TIME PERIOD IS PERMITTED.** If Patent Owner does not file a timely statement under 37 CFR 1.530(b), then no reply by requester is permitted.

/MICHAEL R ROSWELL/ Primary Examiner, Art Unit 3992		

cc:Requester (if third party requester)

DECISION ON REQUEST FOR EX PARTE REEXAMINATION

This Office action is in response to a request for reexamination of claims 1, 6, 9-11, 14, and 15 of US Patent 7,987,285 ("the '285 Patent"), submitted by Third Party Requester (3PR) on 24 May 2024.

A substantial new question of patentability affecting claims 1, 6, 9-11, 14, and 15 of US Patent 7,987,285 is raised by the request for *ex parte* reexamination.

The Requester did not request reexamination of claims 2-5, 7-8, 12-13, and 16 of the '285 Patent and did not assert the existence of a substantial new question of patentability for such claims. Subsequently, claims 2-5, 7-8, 12-13, and 16 will not be reexamined. The Office's determination in both the order for reexamination and the examination stage of the reexamination ordered will generally be limited solely to a review of the claim(s) for which reexamination was requested (see MPEP §§ 2240 and 2243). Additionally, if a Requester fails to set forth the pertinency and manner of applying the cited art to a claim as required by 37 CFR 1.510(b), that claim will generally not be reexamined[1].

Scope of Reexamination

Claims 1, 6, 9-11, 14, and 15 will be reexamined as requested.

Claims 2-5, 7-8, 12-13, and 16 are not subject to reexamination.

35 USC 325(d)

A review of the post grant history for the underlying patent indicates that there have been no other Office post grant challenges made to the patent (Reexamination Proceedings or

[1] See *Sony Computer Entertainment America Inc. v. Dudas*, 85 USPQ2d 1594 (E.D. Va 2006). The decision of the District Court upheld the Office's discretion to not reexamine claims in an *Inter Partes* Reexamination proceeding other than those claims for which reexamination had specifically been requested.

Inter Partes Review, Post Grant Review, and/or Covered Business Method trials). Accordingly, a discretionary denial of reexamination pursuant to 35 USC 325(d) is not applicable.

Information Disclosure Statement

Regarding Information Disclosure Statement (IDS) submissions, MPEP § 2256 recites: "Where patents, publications, and other such items of information are submitted by a party (Patent Owner or Requester) in compliance with the requirements of the rules, the requisite degree of consideration to be given to such information will normally be limited by the degree to which the party filing the information citation has explained the content and relevance of the document. The initials of the examiner placed adjacent to the citations on the form PTO/SB/08 or its equivalent, without an indication to the contrary in the record, do not signify that the document has been considered by the examiner any further than to the extent noted above."

Accordingly, the IDS submission filed by 3PR on 24 May 2024 has been considered by the Examiner only within the scope required by MPEP § 2256, unless otherwise noted.

Summary of Prosecution History

US Application 12/170,347

The '285 Patent was filed as US Application 12/170,347 ("the '347 Application") on 9 July 2008, claiming priority from provisional patent application 60/948,914, filed 10 July 2007. The '347 Application originally presented claims 1-23, including independent claims 1, 9, 15, 18, and 21-23.

The Office mailed a first action on 18 March 2010, rejecting all presented claims under 35 USC 103(a) over **Chou** (US Publication 2006/0165166) in view of **Birch** (US Publication 2002/0154694).

Patent Owner filed a response to the first action on 18 June 2010, presenting claims 1-23 as originally filed and asserting distinctions between the claims of the '347 application and

the applied references. The accompanying remarks focus extensively on the limitations of independent claims 1, 9, 15, 18, and 21-23.

A second non-final action was mailed by the Office on 1 September 2010, introducing a rejection of claims 21 and 22 under 35 USC 101, and maintaining the rejection of claims 1-23 over **Chou** and **Birch**.

Patent Owner filed a subsequent response on 28 December 2010, presenting original claims 1-17, 19-20, and 23. Claim 18 was amended to correct a minor informality, while claims 21-22 were amended solely to obviate the rejection under 35 USC 101. The accompanying remarks with respect to the 35 USC 103(a) rejections similarly focus extensively on the perceived differences between the applied prior art and independent claims 1, 9, 15, 18, and 21-23.

On 11 March 2011, Patent Owner filed a terminal disclaimer between the '347 application and commonly assigned US Application 12/416,085. The terminal disclaimer was approved by the Office on 17 March 2011.

A Notice of Allowability (NOA) was mailed by the Office on 25 March 2011, indicating the allowability of claims 1, 5-9, 13-16, and 18-23. The NOA included an Examiner's Amendment cancelling claims 2-4, 10-12, and 17, and incorporating the limitations of dependent claims 2-4 into independent claim 1, the limitations of dependent claims 10-12 into independent claim 9, and the limitations of dependent claim 17 into independent claim 15. Substantially similar amendments were made to independent claims 18 and 21-23 (25 March 2011 NOA at 3-9).

The NOA further included the following statement of reasons for allowance (25 March 2011 NOA at 9-10, reformatted for clarity):

> None of the prior arts of record individually or in combination explicitly teach or fairly suggest or render obvious the each and every claimed limitation of the current invention as amended by the applicant, especially the limitation of
>
> a method comprising:
>
> receiving a receiver report from a terminal;
>
> estimating one or more network conditions of a media network using the receiver report;

determining an optimal session bitrate using the estimated one or more network conditions, wherein determining the optimal session bitrate further comprises:

determining stability criterion using the estimated one or more network conditions, wherein determining stability criterion includes at least one of:

comparing a media time in transit and a round trip time estimate; and comparing a bitrate received with a current bitrate session; and

determining the stability of the media network; and

providing the optimal session bitrate based at least in part on the media-network-stability determination; and

providing media data to the terminal according to the optimal session bitrate.

As noted in the Prosecution History section of the instant Request (at 5-6), the stated reasons for allowance reiterate the limitations of amended claim 1. Inasmuch as the NOA fails to expand upon the particular features of the claims deemed patentably distinct from the cited prior art, it can be inferred that the amended limitations of the independent claims are central to patentability.

Subsequently, it appears that the independent claims of the '285 Patent to which the instant Request is directed were allowed based at least in part on the following limitations (emphasis reproduced from NOA):

Patented Claim 1

determining an optimal session bitrate using the estimated one or more network conditions, wherein determining the optimal session bitrate further comprises:

determining stability criterion using the estimated one or more network conditions, wherein determining stability criterion includes at least one of:

comparing a media time in transit and a round trip time estimate; and

comparing a bitrate received with a current bitrate session; and

determining the stability of the media network; and

providing the optimal session bitrate based at least in part on the media-network-stability determination

Patented Claim 6

determining stability criterion, wherein determining stability criterion comprises at least one of:

comparing a media time in transit and a round trip estimate; and

comparing a bitrate received with a current bitrate session; and
determining the stability of the media network using the determined stability criterion;
controlling a session bitrate based at least in part on the media-network-stability determination

Patented Claim 9

allocating the optimal session bitrate between audio and video media to produce an optimal audio bitrate and an optimal video bitrate, where allocating the optimal session bitrate between audio and video media is based at least in part on privileging either the audio media or the video media over the other

Patented Claim 11

determine stability criterion using the estimated one or more network conditions, wherein determine stability criterion includes at least one of:
comparing a media time in transit and a round trip estimate, and
comparing a bitrate received with a current bitrate session, and
determine the stability of the media network,
determine an optimal session bitrate based at least in part on the media-network stability determination

Patented Claim 14

determining stability criterion, wherein determining stability criterion comprises at least one of:
comparing a media time in transit and a round trip time estimate; and
comparing a bitrate received with a current bitrate session; and
determining the stability of the media network using the determined stability criterion;
controlling a session bitrate based at least in part on the media-network-stability determination

Patented Claim 15

allocating the optimal session bitrate between audio and video media to produce an optimal audio bitrate and an optimal video bitrate, wherein allocating the optimal session bitrate between audio and video media is based at least in part on privileging either the audio media or the video media over the other

As can be seen above, the identified limitations of independent claims 1, 6, 11, and 14 are substantially similar, as are those of independent claims 9 and 15.

Priority Determination

The '285 Patent claims priority from provisional application 60/948,917, filed 10 July 2007. The Request at 10 notes that the '285 Patent has an earliest claimed priority date of 10 July 2007, and does not challenge the claim to priority.

Prior Art Cited in the Request

The instant Request indicates that the following six prior art references present substantial new questions of patentability with respect to claims 1, 6, 9-11, 14, and 15:

- **van Beek** – US Publication 2005/0071876, published 31 March 2005
- **Urzaiz** – US Publication 2005/0021830, published 27 January 2005
- **Gupta** – US Patent 7,734,800, filed 25 August 2003
- **Pogrebinsky** – US Patent 7,142,506, filed 2 February 1999
- **Yano** – US Publication 2003/0037158, published 20 February 2003
- **Ogawa** – US Publication 2006/0218264, filed 22 March 2006

As noted in the Request at 6, none of the prior art in the Request was applied or cited during prosecution of the '285 Patent.

Affidavits, Declarations, or Other Written Evidence

The Examiner recognizes the declaration of Dr. Lina Karam (EX1003), referenced in support of Third Party Requester. The declaration has been considered and made of record. The Examiner further notes that affidavits or declarations or other written evidence which explain the contents or pertinent dates of prior art patents or printed publications in more detail may be considered in reexamination (MPEP § 2258(I)(E)), but any rejection must be based

upon the prior art patents or printed publications as explained by the affidavits or declarations or other written evidence.

Substantial New Questions of Patentability

The presence or absence of a "substantial new question of patentability" determines whether or not reexamination is ordered. For a substantial new question of patentability to be present, it is only necessary that: (A) the prior art patents and/or printed publications raise a substantial question of patentability regarding at least one claims, i.e., the teaching of the (prior art) patents and printed publications is such that a reasonable examiner would consider the teaching to be important in deciding whether or not the claim is patentable; and (B) the same question of patentability as to the claim has not been decided by the Office in an earlier concluded examination or review of the patent, raised to or by the Office in a pending reexamination or supplemental examination of the patent, or decided in a final holding of invalidity (after all appeals) by a federal court in a decision on the merits involving the claim. If a reexamination proceeding was terminated/vacated without resolving the substantial question of patentability question, it can be re-presented in a new reexamination request. It is not necessary that a "prima facie" case of unpatentability exist as to the claim in order for a substantial new question of patentability to be present. Thus, a substantial new question of patentability as to a patent claim could be present even if the examiner would not necessarily reject the claim as either fully anticipated by, or obvious in view of, the prior art patents of printed publications (see MPEP § 2242(I)).

Claims 9, 10, and 15

Independent claims 9 and 15 of the '285 Patent present substantially similar subject matter. Claim 10 of the '285 patent depends from claim 9. For the purposes of discussion, claim 9 will be used as a representative claim for the proposed rejections of the Request. The

emphasized portions of claim 9 are utilized to show how specific teachings of the proposed references create a substantial new question of patentability.

Claim 9:

A method comprising:

receiving an optimal session bitrate;

allocating the optimal session bitrate between audio and video media to produce an optimal audio bitrate and an optimal video bitrate, wherein allocating the optimal session bitrate between audio and video media is based at least in part on privileging either the audio media or the video media over the other;

encoding audio and video media data according to the optimal audio bitrate and the optimal video bitrate; and

providing the encoded audio and video data for transmittal to a terminal.

van Beek

The van Beek reference generally discloses a wireless media transmission system that incorporates transmission techniques such as single stream dynamic bit rate adaptation, multi-stream dynamic bit rate adaptation, bit rate constraints for multiple streams, and steam prioritizing or weighting in an attempt to optimize the transmission system.

Regarding the limitation *allocating the optimal session bitrate between audio and video media to produce an optimal audio bitrate and an optimal video bitrate, wherein allocating the optimal session bitrate between audio and video media is based at least in part on privileging either the audio media or the video media over the other*, it is noted that the claim does not explicitly disclose the particulars of the "optimal session bitrate". The specification of the '285 Patent discloses how "rate control is essential for media streaming over packet networks", and adjusting the bitrate and media encoding scheme "to optimize the viewing and listening

experience of the user". As such, the broadest reasonable interpretation (BRI) of the term "optimal session bitrate" includes a bitrate that is set with the consumption experience of the user in mind.

van Beek discloses a system that uses dynamic rate adaptation for multiple media source streams, at [0087-0088] and seen in Fig. 6. The system includes a transcoder manager for allocating bitrates to multiple media streams. van Beek further discloses wherein audio and video streams may be separated and "treated differently" during their transmission, at [0121]. van Beek notes that prioritizing streams based on modality takes into account the experience of the user ("in many cases, loss of audio information is deemed more severe by users than loss of video information"), at [0121].

The van Beek reference was not of record in the prior original examination and thus was not previously discussed by the examiner nor applied to any of the claims in the prior original examination.

It is agreed that the consideration of van Beek raises an SNQ as to claims 9, 10, and 15 of the '285 Patent. There is substantial likelihood that a reasonable examiner would consider these teachings important in deciding whether or not these claims are patentable.

Accordingly, van Beek raises a substantial new question of claims 9, 10, and 15. Such question has not been decided in a previous examination of the '285 Patent, nor was there a final holding of invalidity by the Federal courts regarding the '285 Patent.

Urzaiz, Gupta, and Pogrebinsky

The Urzaiz reference is generally related to the transmission of data/media streams across a network. Urzaiz identifies existing problems with the simultaneous transmission related audio and video data over separate streams, with particular respect to problems arising from the exclusive determination of transmission rates for each stream (see Urzaiz at [0011]).

Gupta is generally related to a system for multimedia streaming in which a user may selectively vary the speed of streaming content. A media server responds to the user speed designation by streaming media at a rate affected by the media client demands (col. 8, lines 34-44). Gupta discloses in a further embodiment that multiple media streams representing the same content may be stored on a media server, with particular streams selected for transmission based at least in part on the user selected playback speed and available bandwidth (col. 12, line 42 through col. 13, line 3). Gupta further discloses prioritizing one modality of media over another when allocating bandwidth (col. 13, lines 4-12).

Pogrebinsky is generally related to the transmission of multimedia over a network, and adjusting transmission parameters based on a monitored state of the network. Pogrebinsky further discloses wherein bitrate adjustments are made with respect to media quality metrics (col. 7, lines 37-49), and wherein audio and video stream bitrates may be allocated based on a priority of one modality over the other (col. 8, lines 58-64).

Regarding the limitation *allocating the optimal session bitrate between audio and video media to produce an optimal audio bitrate and an optimal video bitrate, wherein allocating the optimal session bitrate between audio and video media is based at least in part on privileging either the audio media or the video media over the other*, Urzaiz, Gupta, and Pogrebinsky appear to provide relevant teachings based on the above citations.

The Urzaiz, Gupta, and Pogrebinsky references were not of record in the prior original examination and thus were not previously discussed by the examiner nor applied to any of the claims in the prior original examination.

It is agreed that the consideration of Urzaiz, Gupta, and Pogrebinsky raises an SNQ as to claims 9, 10, and 15 of the ‘285 Patent. There is substantial likelihood that a reasonable examiner would consider these teachings important in deciding whether or not these claims are patentable.

Accordingly, Urzaiz, Gupta, and Pogrebinsky raises a substantial new question of claims 9, 10, and 15. Such question has not been decided in a previous examination of the '285 Patent, nor was there a final holding of invalidity by the Federal courts regarding the '285 Patent.

Claims 1, 6, 11, and 14

Independent claims 1, 6, 11, and 14 of the '285 Patent present substantially similar subject matter. For the purposes of discussion, claim 6 will be used as a representative claim for the proposed rejections of the Request. The emphasized portions of claim 6 are utilized to show how specific teachings of the proposed references create a substantial new question of patentability.

Claim 6:

A method comprising:

receiving a receiver report from a terminal;

estimating one or more network conditions of a media network using the receiver report;

determining stability criterion, wherein determining stability criterion comprises at least one of:

comparing a media time in transit and a round trip time estimate; and

comparing a bitrate received with a current bitrate session; and

determining the stability of the media network using the determined stability criterion;

controlling a session bitrate based at least in part on the media-network-stability determination; and

providing the session bitrate to an encoder for transmitting media data according to the provided session bitrate.

Yano and Ogawa

The Yano reference generally relates to a media transmission system that monitors data losses on a network and adjusts an output rate accordingly (see [0002], [0007]). Ogawa generally relates to a media transmission system in which a server predicts an optimal bitrate value in consideration of factors such as network congestion or disturbance (see [0016]).

Regarding *determining stability criterion, wherein determining stability criterion comprises at least one of:*

comparing a media time in transit and a round trip time estimate; and

comparing a bitrate received with a current bitrate session

the Examiner notes that the specification of the '285 Patent discloses that "Media Time in Transit (MTT), [is] computed as the difference between the timestamp of the most recently sent RTP packet and the timestamp of the last RTP packet received by the player reported in RTCP receiver report", and that the "Round Trip Time Estimate (RTTE) *can be* obtained by averaging a number of lower MTT values", "RTTE *could be* calculated by averaging the lowest 3 MTT values out of all stored MTT values for that streaming network", and "any method can be used to estimate a round trip time for the streaming media RTCP sender report". See col. 6, lines 41-61.

Subsequently, under BRI standards, the term "media time in transit" is defined as a discrete calculation of the difference between timestamps of the last RTP packet sent and the last RTP packet received as reported in an RTCP receiver report. A "round trip time estimate" is not afforded any particular definition, and may be any suitable methodology to provide such estimate.

Yano discloses at [0089-0093] that a network buffer data volume may be calculated as the difference between a data round trip time reference value (i.e. a "round trip time estimate") and a measured current round trip time.

Regarding *determining the stability of the media network using the determined stability criterion*, Yano discloses at [0094] using the calculated round trip time difference to obtain a current network buffer data volume (i.e., "determining the stability of the network).

As to *controlling a session bitrate based at least in part on the media-network-stability determination*, Yano discloses that a transmission rate may be determined based on the conditions of the network, at [0007-0008].

The Yano and Ogawa references were not of record in the prior original examination and thus were not previously discussed by the examiner nor applied to any of the claims in the prior original examination.

It is agreed that the consideration of Yano and Ogawa raises an SNQ as to claims 1, 6, 11, and 14 of the '285 Patent. There is substantial likelihood that a reasonable examiner would consider these teachings important in deciding whether or not these claims are patentable.

Accordingly, Yano and Ogawa raises a substantial new question of claims 1, 6, 11, and 14. Such question has not been decided in a previous examination of the '285 Patent, nor was there a final holding of invalidity by the Federal courts regarding the '285 Patent.

Conclusion

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 USC 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extensions of time in *ex parte* reexamination proceedings are provided for in 37 CFR 1.550(c).

The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving US Patent 7,987,285 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or

proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282, and 2286.

All correspondence relating to this ex parte reexamination proceeding should be directed:

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By Mail to: Mail Stop *Ex Parte* Reexam
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For electronic transmissions, 37 CFR 1.8(a)(1)(i)(C) and (ii) states that correspondence (except for a request for reexamination and a corrected or replacement request for reexamination) will be considered timely filed if (a) it is transmitted via the USPTO patent electronic filing system in accordance with 37 CFR 1.6(a)(4), and (b) includes a certificate of transmission for each piece of correspondence stating the date of transmission, which is prior to the expiration of the set period of time in the Office action.

Any inquiry concerning this communication should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

/MICHAEL ROSWELL/
Primary Examiner, Art Unit 3992

Conferees:

/ADAM L BASEHOAR/
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