IPR2018-01187, -01630
Netflix, Inc.
v.
Realtime Adaptive Streaming LLC
Patent 9,769,477

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Argument Roadmap

- The Petitions do not identify the claimed “first” or “second” encoders
- Limitation 1[B] requires the first encoder being “configured to” compress video or image data faster than the second encoder
- The Petitions fail to show Imai, Pauls, or any combination disclose limitation 1[B]
- The Petitions fail to explain why a POSITA would combine Imai and Pauls
- The Petitions fail to explain how a POSITA would combine the references
- The Petitions do not address the limitations of claim 20

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The Petitions Do Not Identify The Claimed "first" Or "second" Encoders

The Petitions must explain "how any specific combination would operate or read on" the claims. *ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1327-28 (Fed. Cir. 2012).

POR at 8

The Petitions Do Not Identify The Claimed "first" Or "second" Encoders

Limitation 1[B] requires specifying which of at least two encoders is the "first asymmetric data compression encoder" that is "configured to compress . . . video or image data" and which is the "second asymmetric data compression encoder" that is configured to compress video or image data.

POR at 10 (quoting Ex. 1001 at Cl. 1[B])

Dr. Storer Would Only Say That the "first" Encoder Is Whichever Is "faster"

"And that encoder that is faster, for example, would correspond to a first encoder, and the one that is slower, that is being replaced -- for example, in that example, would correspond to a second encoder." Ex. 2003 at 66:13-67:9

POR at 11-12 (quoting Ex. 2003 at 66:13-67:9)

Dr. Storer Would Only Say That the “first” Encoder Is Whichever Is “faster”

- The references never disclose the relative speeds of any encoders.
- The references never disclose sufficient information to determine the relative speeds of any encoders.

POR at 13-16

The Petitions Do Not Identify The Claimed “first” Or “second” Encoders

Petitioners also fail to indicate which would be the claimed “first” and “second” encoders of Claim 20.

POR at 51-53

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The "first" encoder must compress at a higher rate than the "second" encoder *because it is designed to do so.*

- *Aspex Eyewear v. Marchon Eyewear*, 672 F.3d 1335, 1349 (Fed. Cir. 2012)
- *In re Man Mach. Interface Techs.*, 822 F.3d 1282, 1286 (Fed. Cir. 2016)
- *In re Giannelli*, 739 F.3d 1375, 1379 (Fed. Cir. 2014)
- *Intellectual Ventures I v. Altera*, 2013 WL 3913646, at *7 (D. Del. July 26, 2013)
- *SIPCO v. Abb*, 2012 WL 3112302, at *7 (E.D. Tex. July 30, 2012)

POR at 17-19

The ’477 Patent Uses “configured to” To Convey Purposeful Design

- “In this way, a system can be configured to achieve greater speed, while not sacrificing disk space.” Ex. 1001 at 18:26-41.
- The specification describes a “programmable logic device” being “configured for its environment.” Ex. 1001 at 16:37-40.

POR at 19-20

The Invention Relies On The Predictable Relationship Between The Speeds Of The Encoders

- Where the speed of the encoder causes a "bottleneck" because "the compression system cannot maintain the required or requested data rates," "then the controller will command the data compression system to utilize a compression routine providing faster compression . . . so as to mitigate or eliminate the bottleneck." Ex. 1001 at 14:14-24.

- The invention switches to a "faster rate of compression" when the "throughput falls below a predetermined threshold" "so as to increase the throughput." Ex. 1001 at 8:12-18.

POR at 3, 21

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Petitioners Argue that limitation 1[B] would be met by chance

"A POSITA would have understood that it is only a remote possibility that any two different asymmetric data compression encoders would have the same execution speed, and therefore the obvious result of including two or more different asymmetric compression encoders is that one encoder would have a higher data compression rate than another encoder." Pet. 21.

POR at 22-24

Imai Does Not Disclose Limitation 1[B]

[0068]
Here, one example of the coding method, which provides a relatively many bit rate of the resulting coded data, is the linear PCM (the coded data resulted with this coding method is the same as that obtained by outputting a digital audio signal after A/D conversion as it is). Furthermore, example of the coding method, which provides a relatively less bit rate of the resulting coded data (i.e., which provides a high compression rate), are MPEG layer 3 and ATRAC 2. One example of the coding method, which requires a not so large amount of computation for decoding, is ATRAC. In addition, examples of the coding method suitable for a voice are HVXC and a method utilizing a linear estimation factor. Moreover, HVXC is one of the methods previously proposed by the assignee of this application, and is disclosed in detail in, e.g., Japanese Unexamined Patent Publication No. H 9 (1997) - 127989 (corresponding to U.S. Pat. No. 5,848,387).

POR at 26 (citing Ex. 1005 at [0068])

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POR at 28 (citing Ex. 1005 at [0068])

Imai Does Not Disclose Limitation 1[B]

[0069]
In addition, here, it is here assumed that even in the case of the encoders all employing, e.g., ATRAC 2only, if bit rates are different from each other, this means the use of "different coding methods". Therefore, here, for example, all the encoders 53_1 to 53_N perform encoding with ATRAC 2, while data rates of coded data outputted from the encoders are 64 Kbps, 32 Kbps, 24 Kbps, . . ., respectively.

POR at 28-29 (citing Ex. 1005 at [0068])

Imai Does Not Disclose Limitation 1[B]

[0067]
The encoders 53_1 to 53_N (N is two or more) are constructed to encode the audio signal with different coding methods from each other (for example, linear PCM (Pulse Code Modulation), ADPCM (Adaptive Differential PCM), layers 1, 2, 3 of MPEG (Moving Picture Experts Group), ATRAC (Adaptive Transform Acoustic Coding), ATRAC 2, and HVXC (Harmonic Vector Excitation Coding)). Stated otherwise, in the embodiment, the encoders 53_1 to 53_N are prepared by using encoders which perform encoding of the audio signal with various coding methods, including a method which provides a relatively large (high) bit rate of the resulting coded data, but can reproduce an audio signal with relatively good reproducibility, a method which can provides a relatively small (low) bit rate of the resulting coded data, but reproduces an audio signal with relatively poor reproducibility, a method which requires a larger amount of computation for decoding (such a method usually also requires a larger amount of computation for coding), a method which requires a not so large amount of computation for decoding, and a method particularly suitable for coding a voice (human voice).

Sur-Reply at 7-9 (citing Ex. 1005 at [0067])

A POSITA Would Not Modify Imai to Meet Limitation 1[B]

[0145]
Next, in the network 2 shown in the FIG. 1, the transmission rate in transmitting coded data from the server 1 to the client terminal 3 (i.e., the transmission band allocated to the coded data) generally varies due to the amount of traffic, etc. except the case of using a protocol reserving the band used, such as RSVP (Resource Reservation Protocol) specified in RFC (Request For Comments) 2205 (issued by IFTF (Internet Engineering Task Force)), for example. Accordingly, if the transmission rate of the network 2 is reduced down smaller than the data rate of the coded data, transmission of the coded data becomes so late that audio signals cannot be reproduced in real time.

POR at 30-34 (citing Ex. 1005 at [0145])

Pauls Does Not Disclose Limitation 1[B]

[0010] Transcoding techniques include encoding algorithms for encoding (or compressing) the data. Encoding (or compressing) the data facilitates data transmission by reducing the amount of data to be transmitted which, in turn, decreases the time required to transmit the data (i.e., transmission time) from the access server to the user over a transmission channel of limited bandwidth (i.e., slower access speeds). Some encoding algorithms, however, have associated loss that may adversely affect data quality. Algebraic Code Excited Linear Prediction (ACELP), Vector Sum Excited Linear Prediction (VSELP), Enhanced Variable Rate Coder (EVRC), h.263 (which is a set of guidelines being considered by the International Telecommunications Union for implementation into standards), pkzip (by PKWare, Inc.), MPEG and MPEG2 (Moving Pictures Experts Group), and JPEG (Joint Pictures Experts Group) are some examples of encoding algorithms which are well-known in the art. Each of the aforementioned encoding algorithms have associated different levels or percentages of compression.

POR at 37-38 (citing Ex. 1007 at [0010])

Pauls Does Not Disclose Limitation 1[B]

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FIG. 5

DATA TYPE	SUB-TYPES (BIT RATE)	TRANSCODER ENCODING ALGORITHMS (BIT RATE)	ADAPTATION LAYERS
SPEECH/VOICE	AUDIO (256 Kbps) WAVE (64 Kbps) SPEECH (32 Kbps)	VCELP (8Kbps) VSEOP (8Kbps) EDRU (4-8 Kbps)	HYBRID ARQ ERROR CONCEALMENT (MUTING)
VIDEO/IMAGE	TIFF GIFF MPEG (1.5Mbps) MPE62 (2.0 Mbps)	H.263 (8-24 Kbps)	HYBRID ARQ ERROR CONCEALMENT (INTERPOLATION)
TEXT	ASCII MSWORD	GZIP PKZIP	ARQ

POR at 38-39 (discussing Ex. 1007 at Fig. 5)

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The Petition Must Explain the Motivation to *Combine*

"Obviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention." *Personal Web Tech. v. Apple*, 848 F.3d 987, 993-94 (Fed. Cir. 2017) (emphasis original; internal citations and quotations omitted).

Sur-Reply at 15

The Petition's Combination

"A POSITA would thus have been motivated to combine the systems of Imai and Pauls to utilize the numerous video and image data compression encoders of Pauls to enable video compression in Imai's system." Pet. 53.

POR at 42 (citing Pet. 53)

The Petition's Motivation

"As Imai explicitly applies its teachings to video encoding, a POSITA would logically ***look towards*** other prior art references involving data encoding and video encoding techniques to create a video encoding and transmission system. ***One such prior art reference is Pauls***, which includes extensive teachings specific to video." Pet. 53 (emphasis added).

POR at 43 (citing Pet. 53)

Realtime Data v. Inacu is not Applicable

"This is enough evidence to support a finding that a person of ordinary skill in the art would have turned to Nelson, a well-known data compression textbook, ***to better understand or interpret O'Brien's compression algorithms***." *Realtime Data v. Iancu*, 912 F.3d 1368, 1374 (Fed. Cir. 2019) (emphasis added).

POR at 49-50 (citing *Realtime Data v. Iancu*, 912 F.3d 1368, 1374)

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The Petition Must Explain the "*How*"

A party asserting obviousness ***must*** explain

"[1] ***how*** specific references could be combined,

[2] ***which*** combination(s) of elements would yield a predictable result, [and]

[3] ***how*** any specific combination would operate or read on the asserted claims."

POR at 52 (quoting *ActiveVideo*, 694 F.3d at 1327-28)

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"The petition must specify where each element of the claim is found in the prior art patents or printed publications relied upon." 37 C.F.R. § 42.104(b)(4).

Sur-Reply at 21 (citing 37 C.F.R. § 42.104(b)(4))

The Petitions do not address the limitations of claim 20

"Claim 20 and Claim 2 include all limitations of independent Claim 1 and have the additional requirement that 'at least one of the plurality of different asymmetric data compression encoders is configured to utilize an arithmetic algorithm.'" Pet. 61.

POR at 58 (citing Pet. 61)