

UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT TRIAL AND APPEAL BOARD

MOTOROLA SOLUTIONS, INC.
Petitioner,

v.

STA GROUP LLC,
Patent Owner.

Case IPR2023-01293
U.S. Patent No. 8,489,134 B2

PATENT OWNER'S PRELIMINARY RESPONSE

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Exhibit List

Exhibit No.	Exhibit Name
2001	Declaration of Michael Craner
2002	December 2023 DocketNavigator, Time to Trial Statistics in Patent Cases in the United States District Court for the Eastern District of Texas

I. Introduction

Patent Owner, STA Group, LLC (“Patent Owner”), submits this Patent Owner Preliminary Response (“POPR”) pursuant to 37 C.F.R. § 42.107(a) in response to the *Inter Partes* Review (“IPR”) petition (“Petition”) filed by Petitioner Motorola Solutions, Inc. (“Petitioner”) for claims 1-14 (“Challenged Claims”) of U.S. Patent 8,489,134 B2 (“’134 Patent”, Ex. 1001).

The ’134 Patent presents a novel cost savings method for the establishment and management of expensive communications resources, such as satellite links. Prior art systems, like Multicast-Unicast-Multicast (“MUM”) configurations, pre-allocate bandwidth on reserve. This is often highly inefficient, as the reserved bandwidth largely goes unused. Similarly, dynamic trunks establish links when a user in a multi-zone talk group is activated. However, these links are often established and maintained even when there are not active users at a remote site. The ’134 Patent solves the problems in the prior art by monitoring the presence or absence of users, and the applications being used by the users, to dynamically allocate bandwidth as needed, including when the number of users or the applications being used changes. In addition, the ’134 Patent teaches and claims transcoding a signal prior to transmission based on available bandwidth. Combining these elements, the ’134 Patent is able to: (i) establish a link that satisfies the system’s initial demands; (ii) make changes to the bandwidth as the system’s

demands change; (iii) make changes to the signal's coding to decrease bandwidth constraints; and (iv) tear down the link when the system detects an absence of users. For Ground 1, notably absent from the prior art cited by Petitioner is a “trunking element that is automatically configured to select a transcoding based on available bandwidth,” as required by all independent claims of the '134 Patent. Ex. 1001, 8:8-12, 8:56-59, and 9:28-31. The Petition espouses a fundamentally incorrect definition of “transcoding.” The reference relied upon, ETSI-157, at best teaches either a request for additional encoding or the substitution of a coding format or codec, neither of which are “transcoding” to a person of ordinary skill in the art (“POSITA”). Further, ETSI-157 fails to teach “automatically configured to *select a transcoding*.” Instead, the reference merely discloses “*requesting a change to modulation and coding* when appropriate.” For Ground 2, Firestone fails to teach “transcoding based on available bandwidth.” Instead, the reference merely discloses transcoding based on compatibility and format controls across users.

The Board should deny the Petition.

II. The '134 Patent

A. The Invention of the '134 Patent

The '134 Patent issued on July 16, 2013. Ex. 1001, Cover. The invention of the '134 Patent is directed to an innovative system and method to reduce the cost associated with IP Multicasting over telecommunications networks configured for

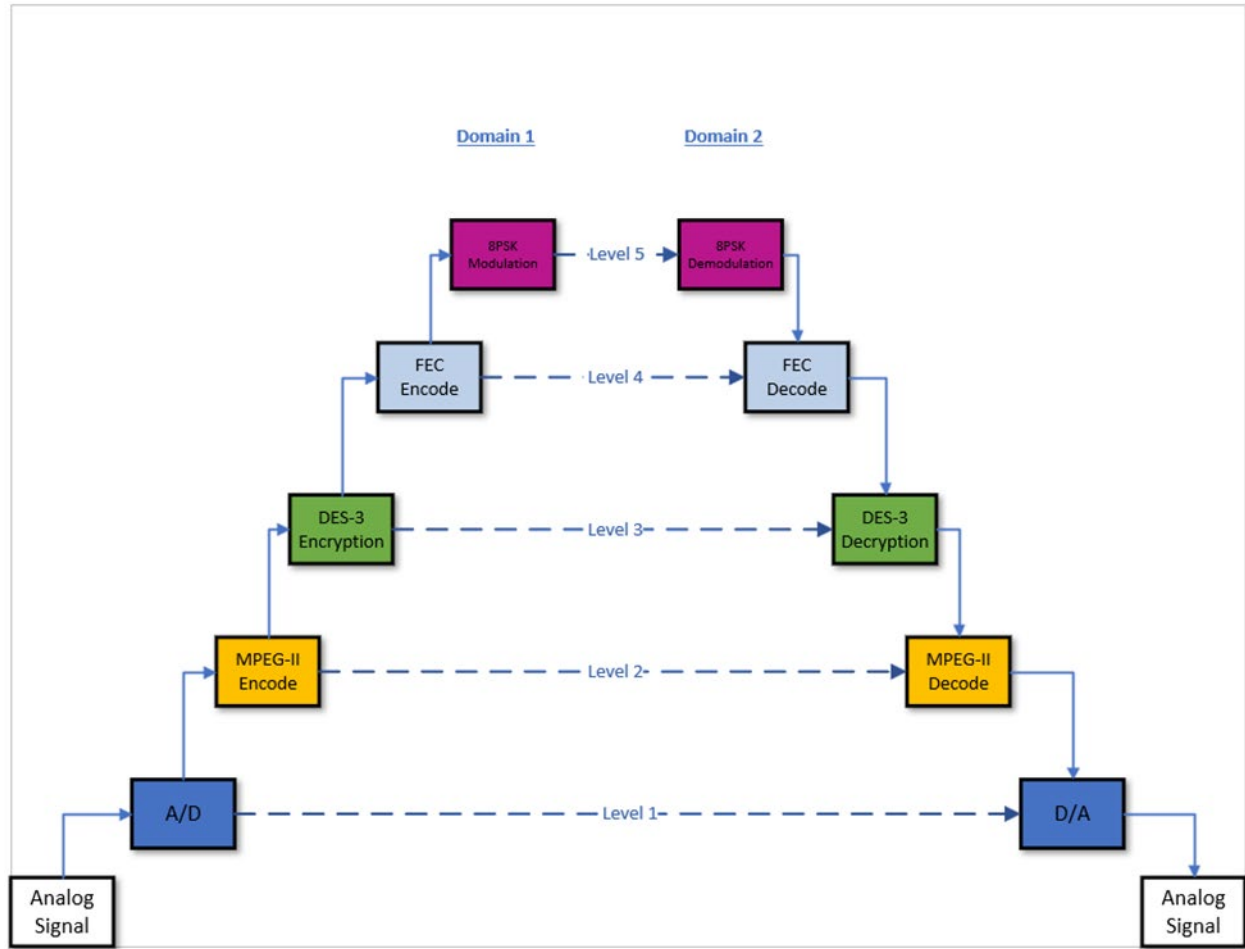
multicasting using internet protocol, such as WAN or satellite networks. Ex. 1001, 1:23-34. In IP Multicasting, sources transmit data to an IP destination address, and receivers use the address to receive the transmission. *Id.* The links that carry out these transmissions are costly. *Id.*

Prior art transmission networks “include a combination of multicast and unicast links using Multicast-Unicast-Multicast (MUM) configuration” that “universally pre-allocate expensive bandwidth, which may lie idle if not planned correctly.” *Id.*, 2:45-50. For example, “[t]ypically, the router configuration will reserve some bandwidth ... based on user needs, compression requirements, etc. and this algorithm can be complex.” *Id.*, 3:6-10. The use of dynamic trunks, which bring up a link when a multi-zone [virtual talk group (“VTG”)] is activated, provided an improvement to the art, but “still has the drawback of establishing a SatCom link even when the remote site does not have any active relevant participants in it.” *Id.*, 2:50-58.

The ’134 Patent discloses an “efficient and cost effective trunking system that reserves and brings-up expensive trunks only when needed,” *Id.*, 2:61-62, by “utiliz[ing] location and presence information to facilitate dynamic network configurations.” *Id.*, 3:11-14. For example, when the system disclosed in the ’134 Patent detects that “a remote site does not have any active users logged into the system” a trunking element “brings down the SatCom link between this location and

all other locations.” *Id.*, 3:14-19. Similarly, links are dynamically brought up when “the system detects that there is at least one user present at each location.” *Id.*, 3:19-22. Such a system overcomes the need for complex algorithms “based on user needs, compression requirements, etc.” to “reserve” bandwidth that is unused or “idle.” *Id.*, 2:48-50; 3:6-10.

Before responding specifically to the Petition, it is important to explain data encoding in the context of data transmission. In a general sense, data transmission requires applying coding to a data signal, which includes both encoding for transmission and decoding upon receipt of the transmission. Ex. 2001, ¶33. Fig. A is illustrative.



Id, Fig. A.

In Fig. A, the left hand side represents a first communications domain transmitting data to another communications domain receiving a digital signal. The dotted lines indicate logical interfaces or peer levels, and the solid lines indicate physical interfaces. *Id*. First, an analog signal is encoded or converted into a digital signal via an analog-to-digital convertor (“A/D”) as shown in the bottom left of Fig. A. *Id*. Going up the left hand side of Fig. A, additional encoding may be applied to the digital signal such as: compression encoding to reduce the size or transmission

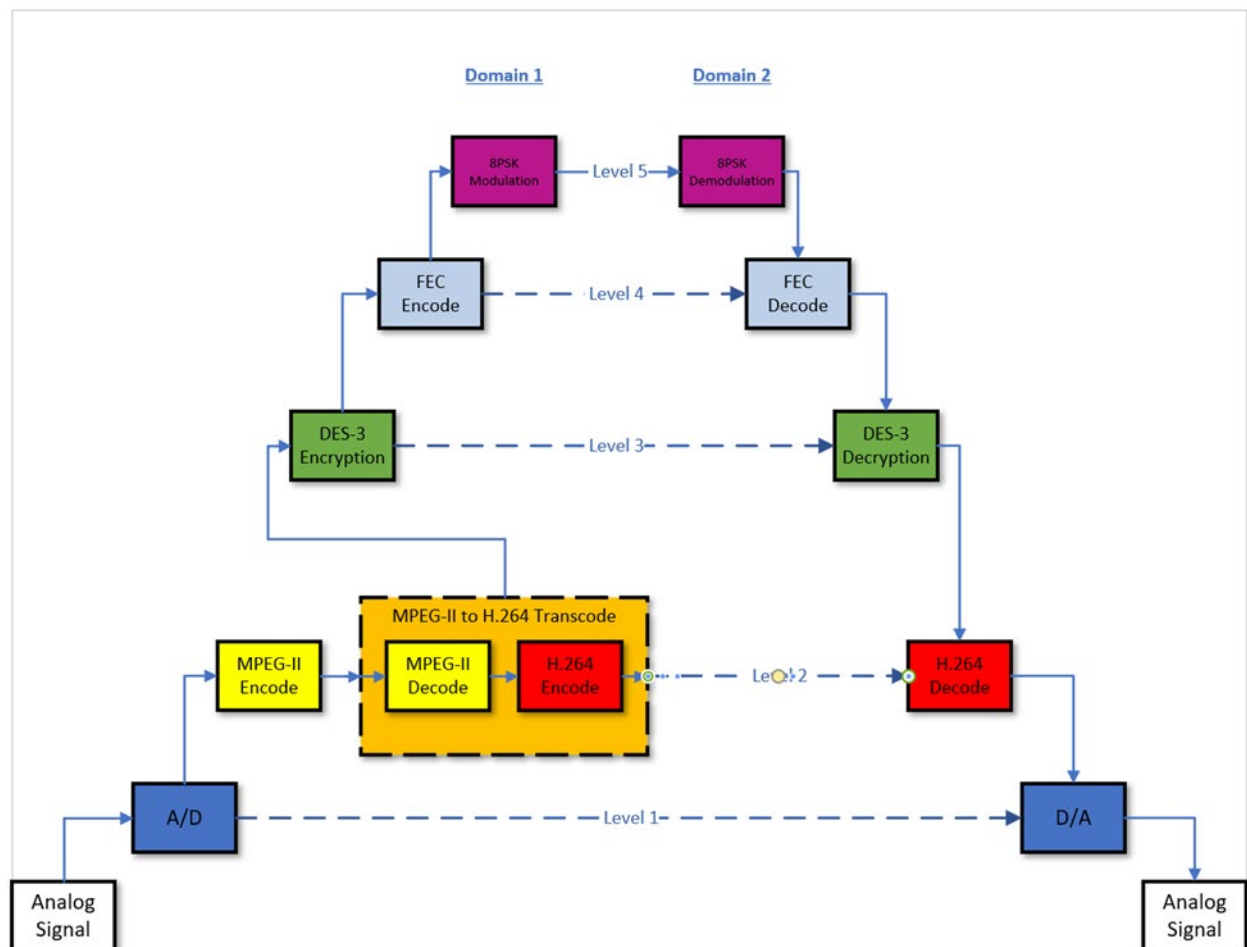
requirements of the signal, encryption encoding for security, and forward error correction encoding for error correction. *Id.* Lastly, modulation encoding is applied that is specific to the transmission medium, e.g., coaxial cable, or satellite. *Id.*

The signal is then transmitted and received by the receiving communications domain. *Id.*, ¶34. Upon receipt, the encoding added to the signal at each level must be decoded to recover the original content. *Id.* Thus, a signal that was modulated is demodulated as shown at the top of Fig. A. *Id.* Depending on which intermediary levels of coding were included, the signal is error corrected, decrypted, and decompressed, as is depicted on the right hand side of Fig. A. *Id.* Lastly, the digital signal is converted back into an analog signal to produce an output that approximates the input. *Id.*

The term of art “codec” is a portmanteau of “coder-decoder” and “compressor-decompressor,” which was known at the time the ‘134 Patent was written. *Id.*, ¶35. A coder-decoder or compressor-decompressor is a device or software that compresses a digital signal “to reduce the file size for faster transmission and reduced storage requirements and decompresses a digital signal for playback.” *Id.* “The term ‘codec’ is also used to describe the coding scheme or format, e.g., MPEG-2 for video or MPEG-3 for audio, used at a particular encoding level.” *Id.* Fig. A only depicts transmission from the first domain to the second domain. However, in a bidirectional system, where both domains are transmitting

and receiving, each communication domain would include, for example, a codec capable of compressing outbound traffic and decompressing inbound traffic. *Id.*

“Transcoding” was known in the art at the time of the ’134 Patent as a coding technique to decode from one coding format and re-encode into another alternative format at the the same encoding level. *Id.*, ¶36. Fig. C is illustrative.



Id., Fig. C.

To a POSITA at the time of the ’134 Patent, “transcoding” was also commonly used to refer to decoding and re-encoding at the compression level. *Id.* Fig. C shows

an example of a transcoder inserted into the signal processing of the transmitting domain at the compression level. *Id.*, ¶36-37. As illustrated, assume a signal compressed with an MPEG-2 encoder is being received by a domain with an H.264 decoder. *Id.*, ¶36. In this situation, a transcoder from MPEG-2 to H.264 is required so that peer level compression encoding in H.264 will be presented to the H.264 decoder in the receiving domain. *Id.*

It should be noted that the transcoder in Fig. C is not used to further encode the MPEG-2 digitally compressed signal, but rather to decode that compression and re-encode it with another compression codec. *Id.*, ¶36-37. Further, a transcoder does not transcode from a compression level of encoding to a different level of encoding, *e.g.*, from MPEG-2 video compression into a triple-DES encrypted signal or an 8PSK modulated signal. *Id.* Instead, transcoding operates on the same logical peer level for decoding and re-encoding. *Id.*

The Petition challenges Claims 1-14—the Challenged Claims—under two total grounds, Grounds 1-2, as detailed below:

Ground	Basis for Challenge
1	Claims 1-14 are obvious over ETSI-156, ETSI-157, ETSI-985, and RFC-2205
2	Claims 1-14 are obvious over Dhesikan, BGAN, and Firestone

B. Claim Construction

The Petition was filed after November 13, 2018, and, as such, the proper claim construction standard to be applied is articulated in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*), in accordance with its regulation, 37 C.F.R. § 42.100(b). *Apple Inc. v. Firstface Co.*, No. 2021-1001, 2021 WL 4156323, at *1, n.1 (Fed. Cir. Sept. 13, 2021).

Therefore, these claims should be “given their ordinary and customary meaning [and] that the ordinary and customary meaning of a claim term is the meaning that the term would have to a [POSITA] in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application.” *Phillips*, 415 F.3d at 1312–13. These arguments for claim terms apply for the purposes of this IPR only and without conceding alternative arguments in the counterpart litigations. *See NEC Display Solutions of America, Inc. v. Ultravision Tech.*, IPR2019-01123, Paper 7, at 12–14 (PTAB Dec. 2, 2019).

The Petition argues that the referenced art obviates claims 1-14 of the ’134 Patent. “An obviousness determination generally requires [1] a finding that all claimed limitations are disclosed in the prior art, and [2] that a person of ordinary skill in the art would have been motivated to combine or modify the teachings in the prior art” *Univ. of Strathclyde v. Clear-Vu Lighting LLC*, 17 F.4th 155, 160 (Fed. Cir. 2021) (citations omitted).

III. The Petition Fails to Show That There is a Reasonable Likelihood of Success Against Any Challenged Claims

A. Ground 1 Fails to Render Claims 1-14 Obvious

Ground 1 alleges that claims 1-14 are obvious over the combination of ETSI-156, ETSI-157, ETSI-985, and RFC-2205. Ground 1 fails to demonstrate that the asserted combination discloses “wherein the communication resource managers each includes respective trunking element that is automatically configured to select a transcoding based on available bandwidth” as claimed in independent claims 1, 8, and 12. Ex. 1001, 8:8-12, 8:56-59, and 9:28-31. For consistency with the Petition, Patent Owner will refer to these common limitations as 1[f], 8[f], and 12[f]. Petition, 3-6 (claim limitation designations 1[f], 8[f], and 12[f]). Further, and for simplicity, Patent Owner will generally refer to only 1[f], but it should be understood that arguments applicable to 1[f] likewise apply to 8[f] and 12[f].

Ground 1 of the Petition fails to disclose the limitations of 1[f] for at least two reasons. First, the Petition uses a fundamentally incorrect definition of “transcoding.” Specifically, the Petition defines “transcoding” as any “coding technique[] applied to previously encoded data.” Petition, 40. The definition clearly conflates transcoding with other coding techniques used to further encode a digital signal for transmission, such as compression, encryption, forward error correction, and/or modulation. Further, there is no support for Petitioner’s definition in ETSI-157. ETSI-157 does not teach or disclose transcoding. Instead, ETSI-157 teaches a

system that may request additional coding to previously encoded data or a substitution of coding for incoming data—each is distinct from “transcoding.”

Additionally, ETSI-157 does not teach “automatically configured to select,” but instead teaches “requesting.” The distinction here is critical because a request can be denied, *i.e.*, it is not certain. On the other hand, limitation 1[f] requires a trunking element that is automatically configured to select a transcoding.

1. The Petition Defines “Transcoding” Incorrectly

The Petition argues that ETSI-156 in view of ETSI-157 teaches or discloses transcoding as claimed in limitation 1[f]. More specifically, the Petition relies exclusively on ETSI-157 for teaching transcoding. However, ETSI-157 does not even use the words “transcode” or “transcoding” in its teachings. Instead, the term “transcoding” appears in ETSI-157 only twice in the title of two references, each of which teach creating format compatibility between two different voice codecs used in IP telephony. Ex. 1011, 9 (reference [6] and [7]). Notably, the Petition does not cite to either of these references. Moreover, the Petition clearly fails to direct the Boards attention to any disclosure in ETSI-157 that teaches transcoding. In the absence of such support, ETSI-156 in view of ETSI-157 fails to teach transcoding as claimed in limitation 1[f].

Nonetheless, the Petition argues based on a fundamentally incorrect definition of transcoding. Ex. 2001, ¶40. Specifically, the Petition argues transcoding is a

“coding technique[] applied to previously encoded data.” Petition, 40 (“[m]odifying bit rate using compression or changing codec type are methods of transcoding because, e.g., they are *coding techniques applied to previously encoded data.*”) (emphasis added). Transcoding is not simply applying a coding technique to previously encoded data for several reasons.

First, this definition conflates “encoding” with “transcoding.” Ex. 2001, ¶41. All digital data is “encoded,” for example an A/D encoder converts an analog signal to a digitally encoded signal. *Id.* Thereafter, additional encoders add coding to the digitally encoded signal for compression, encryption, forward error correction, and modulation. According to the Petitioner’s definition, these encoders are transcoders. *Id.* A POSITA would not agree to such a definition. *Id.* (“a POSITA would *definitely not agree* with such a definition”) (emphasis added).

A POSITA at the time of the ’134 Patent would understand that encoding, decoding, and transcoding are distinct terms. *Id.*, ¶42. For example, at the time of the invention, chips for MPEG-2 encoders, MPEG-2 decoders, H.264 encoders, and H.264 decoders were common. *Id.* The encoding cores/modules take a raw digitally encoded signal and output a compressed signal, and the decoder cores/modules decompress signals from the same codec. *Id.*, ¶41. To create a MPEG-2 to H.264 transcoder, the output of an MPEG-2 decoder is wired to the input of an H.264 encoder. *Id.*, ¶42. This is a completely different process than encoding itself. *Id.*

The Petition's fundamentally incorrect definition of transcoding is necessary to argue that ETSI-157 teaches transcoding. *Id.*, ¶43. By relying on an incorrect definition, the Petition argues that ETSI-157's teaching of additional encoding, or the substitution of one codec for another codec, is transcoding. Neither are transcoding. *Id.*

ETSI-157 actually teaches the following with respect to coding techniques:

The BPM may also request from a suite of other available link layer services such as *compression, encryption and so on*. Joint Network/Link mechanisms can only exist within the BPM and once a DS class has been established the BPM will support it by requesting a *change to modulation and coding when appropriate*.

Ex. 1011, 67 (emphasis added). Notably, this is the only section of ETSI-157 that mentions any type of change to coding technique, and the Petition fails to cite it directly. As demonstrated above, neither compression, encryption, nor modulation is transcoding. Further, there is no support for the Petition to argue that "so on" includes transcoding. ETSI-157 does not teach or disclose transcoding and compression, encryption, and modulation are distinct from transcoding in that they add coding levels as opposed to decode and re-encode a coding level.

In addition, the Petition makes several erroneous arguments. For example, it argues that "a CRM could receive an MPEG video encoded at a certain bit rate and, using QoS functionality in ETSI-157, reduce the bit rate to accommodate available

bandwidth using another codec type.” Petition, 40-41 (citing Dr. Kiaei’s opinion, Ex. 1002, ¶150). Notably, there is a distinction between Dr. Kiaei’s opinion and that argued by the Petition. Dr. Kiaei does suggest that ETSI-157 would support “using another codec type” to reduce the bit rate to accommodate available bandwidth. Ex. 2001, ¶44; *see* Ex. 1002, ¶150. However, Dr. Kiaei does not suggest that ETSI-157 supports applying additional compression encoding to already compressed data. Ex. 2001, ¶44. Instead, the Petition argues that because ETSI-157 teaches a “codec type” field in metadata that somehow an MPEG video may undergo additional compression. *Compare* Petition, 40 (“ETSI-157 discloses a ‘Codec type’ field included in the ‘QoS metadata,’” which “[a] POSITA would have understood ... would only change if necessary,” with Petition, 40-41 (“a CRM could receive an MPEG video encoded at a certain bit rate and, using QoS functionality in ETSI-157, reduce the bit rate to accommodate available bandwidth using another codec type”). However, the “QoS metadata” table merely provides a list of specifications to identify data being delivered to the BSM. Ex. 2001, ¶44; *see also* Ex. 1011, 65-67 (describing the use of the QoS metadata table by the BPM).

ETSI-157 indicates that the BPM may request compression or encryption from the link layer. *See, e.g., id.*, 67 (“The BPM may also request from a suite of other available *link layer services* such as compression, encryption and so on.”) (emphasis added). Ex. 2001, ¶45. As a result, the Petition’s example, which implies

that ETSI-157 teaches that MPEG video data may undergo further video compression, is unsupported. *Id.* This, in addition to its erroneous definition of transcoding, is a telling sign that the Petitioner does not understand the technology of either the '134 Patent or ETSI-157.

Moreover, “change to modulation [or] coding,” and “changing codec type,” are not “transcoding.” Ex. 1011, 67; Petition, p. 40; Ex. 2001, ¶46. Consider for example the transmission of packets A through F over a BSM. Packets A through C arrive at the BSM encoded in MPEG-2, but for one reason or another and after the transmission of packet C, the BPM determines that H.264 is preferred for further transmissions. In a first scenario, the BPM “request[s] a change to ... coding” or “chang[es] codec type” to H.264. *Id.* “Change” suggests that packets D through F will arrive encoded in H.264, which can be easily accomplished by encoding the raw data into H.264 before transmission to the BSM. Ex. 2001, ¶46. In a second scenario, wherein the BPM requests a transcode, “transcode” would imply that packets D through F arrive encoded in MPEG-2 and are then decoded and re-encoded into H.264. *Id.* These two situations describe different processes. *Id.*

The Board should not be persuaded by the Petition’s attempts to conflate the meaning of transcoding with the teachings of ETSI-157 for at least one more reason—the drafters of ETSI-157 were unquestionably familiar with the term

transcoding in light of the cited references [6] and [7], but nonetheless chose to teach “change... coding” instead of “transcoding.” Ex. 1011, 9, 67.

Other arguments supporting the Petition’s fundamentally incorrect definition of transcoding fail for similar reasons. Ex. 2001, ¶47. “Modifying bit rate using compression,” is an example of either additional encoding or changing to a different codec. Petition, 40; Ex. 2001, ¶47. It may result in a different compression ratio subject to the additional encoding or the substituted codec, but that is not decoding one format at a logical peer level of a signal’s code and re-encoding that peer level into another codec. Ex. 2001, ¶47. Likewise, changing the “Codec type” field for “the codec with the highest compatible fidelity,” is not transcoding because ETSI-157 teaches the use of a metadata field to specify different codecs for transmission. Petition, 40; Ex. 2001, ¶47.

Accordingly, Ground 1 fails to provide an acceptable argument that limitation 1[f] is taught by ETSI-157. For at least this reason, the Board should deny institution.

2. The Petition Fails to Identify Where the Reference Art Teaches “Automatically Configured to Select”

Additionally, the Petition fails to identify where ETSI-156 in combination with ETSI-157 the reference art teaches “automatically configured to select” transcoding as claimed in limitation 1[f]. The reason for this failure is that ETSI-157 does not teach a system configured to automatically select a transcoding. Ex. 2001, ¶50. Instead, ETSI-157 teaches a system that may “request” additional encoding or

the substitution of a codec. *See, e.g.*, Ex. 1011, 67 (“The BPM may also *request* from a suite of other available link layer services such as compression, encryption and so on. Joint Network/Link mechanisms can only exist within the BPM and once a DS class has been established the BPM will support it by *requesting* a change to modulation and coding when appropriate.”) (emphasis added).

Nonetheless, to argue that ETSI-157 teaches a system “automatically configured to select” transcoding, the Petition asserts:

[T]o address changes in bandwidth, ETSI-157 discloses a “Codec Type” field included in the “QoS metadata.” [Ex. 1011], p. 68. A POSITA would have understood that this field would only change if necessary and that the codec with the highest compatible fidelity would generally be selected.

Petition, 40. “This is misleading since neither page 68 of ETSI-157 nor section 9 of ETSI-157 (upon which page 68 relies) teaches that any field of the QoS metadata would ‘change... and that the codec with the highest compatible fidelity would generally be selected.’” Ex. 2001, ¶49.

Instead, Section 9 of ETSI-157 teaches the functionality of the “BSM Protocol Manager” or BPM. *Id.*, ¶50; Ex. 1011, 64-68. Therein, the BPM is described as “‘an ‘intelligent’ traffic manager with *packet classifier*’” that “‘*manages traffic* with reference to *policies, admission control and other essential BSM metadata* kept in an accessible and operator controlled database.’” Ex. 2001, ¶50 (citing Ex. 1011, 64)

(emphasis added by expert). The software supporting the BPM includes an arbitrator that compares a database of quality of service metadata to classify packets so that the BPM can direct the flow of signals based upon packet classifications. Ex. 2001, ¶50 (citing Ex. 1011, 66 (the arbitrator “supports a central database of metadata describing IP (or other protocols) and traffic characteristics and managed different modules.”); *also* Ex. 1011, 66 (the information in the metadata “will contain the list of supported IP protocols and their version, the list of supported SI functions and other specific information that will allow an application to receive appropriate service over the BSM.”))).

Page 68 of ETSI-157, shown below, depicts “Table 19” which “illustrates the type of metadata that the arbitrator will use to manage the QoS protocols over the BSM.” Ex. 1011, 66, 68.

Table 19: QoS metadata (example)

Database entries	Description	Parameters	Notes
QoS service class	Describes the end-to-end class of the BSM bearer service.	TBD/will include a number of QoS class and a best effort class.	Parameters specifying the BSM QoS Class; suggested as a potential TS.
Codec type and packetization (optional)	Describes the Codec type used on a bearer and the way the media is packetized.	Codec Type (Optionally a list of possible codecs).	Codec Identifier including any relevant codec parameters, e.g. version number, sampling rate, etc.
		Frames per packet (Optionally a list when codec lists are specified).	Number of frames per packet.
Transport QoS parameters	Specifies the QoS characteristics of the service or flow.	Maximum Delay	The maximum delay permitted over either the BSM only or the end-to-end budget.
		Maximum Packet Delay Variation	The maximum packet delay variation permitted over either the BSM only or the end-to-end budget.
		Maximum Mean Packet Loss	The maximum mean packet loss permitted over either the BSM only or the end-to-end budget.
Traffic descriptor	Characterizes the resource requirements of a flow.	Peak Bit	Maximum bit rate (bit/s) of a flow.
Source and destination IDs	Specifies the identity of the source and destination.	Maximum Packet Size	Maximum size of the packets.
		Source ID	The identity of the source (Ethernet MAC address, IP address, SIP URI).
		Destination ID	The identity of the destination (Ethernet MAC address, IP address, SIP URI).
Application data transport protocol	Specifies the application data transport protocol.	Protocol ID	Identifier of the application data transport protocol used by the bearer. RTP or RTSP etc.
Packet transport protocol	Specifies the packet transport protocol.	Protocol ID	Identifier of the packet transport protocol used in the transport flow. Typically UDP or TCP.
QoS policy	Describes the policy determining the user's entitlement to QoS Service Class.	Token bucket depth Congestion control mechanisms, etc.	The policies implemented to control traffic ingress and egress in the BSM.
QoS mechanism	Describes the mechanism used in the Transport Plane.	Type	None, RSVP/Intserv, DiffServ or MPLS.
		Mechanism specific parameters	TBD
		Authorization Token	TBD

Ex. 1011, 68. “Codec type” is a database entry in Table 19 shown above. *Id.* Other examples include “QoS service class,” “Transport QoS parameters,” “Traffic descriptor,” “Source and destination IDs,” “Application data transport protocol,” “Packet transport protocol,” “QoS policy,” and “QoS mechanism.” *Id.* ETSI-157 teaches that the arbitrator stores in its database of quality of service metadata characteristics of signals, the transmission of which is supported by the BPM for

comparison with the characteristics of incoming signals in order to classify the packets and for the BPM to direct traffic. Ex. 2001, ¶50 (citing Ex. 1011, 66).

Further, the Petition fails to point to where in ETSI-157 “[any] field [associated with the QoS metadata] would only change ... and that the codec with the highest compatible fidelity would generally be selected.” Petition, 40; Ex. 2001, ¶51. Nor would it make sense to change the underlying data of a signal associated with any other field listed in the QoS metadata table. For example, changing the “Source and[/or] destination IDs” encoded in a signal would result in messages being sent with incorrect source identifications and/or to incorrect destinations.

Accordingly, section 9 of ETSI-157 does not teach “that [any] field [associated with the QoS metadata] would change ... and that the codec with the highest compatible fidelity would generally be selected.” Petition, 40; Ex. 2001, ¶51. Instead, it teaches the following:

The BPM may also *request* from a suite of other available link layer services such as compression, encryption and so on. Joint Network/Link mechanisms can only exist within the BPM and once a DS class has been established the BPM will support it by *requesting* a change to modulation and coding when appropriate.

Ex. 1011, 67 (emphasis added). Clearly, ETSI-157 discloses “request” which is not the same as “automatically configured to select.” To a POSITA, a request is a message from one node to another asking for information or resources, which

implies that the request can be denied. Ex. 2001, ¶52. On the other hand, “automatically configured to select” conveys a decision without the possibility of a denial. *Id.*

Accordingly, there is no support from ETSI-157 for the Petition’s argument that it teaches “automatically configured to select” a transcoding. Thus, for this additional reason, Ground 1 fails and the Board should deny institution.

B. Ground 2 Fails to Render Claims 1-14 Obvious

The Petition cites to the combination of Dhesikan, BGAN, and Firestone to render obvious the ’134 Patent. Petition, 51. Again focusing on limitation 1[f], the Petition admits that neither Dhesikan nor BGAN discloses 1[f]. Petition, 73-74. Neither does Firestone. In particular, Firestone does not teach or disclose a system “automatically configured to select a transcoding based on available bandwidth.” Like the other references cited by ETSI-157 with “transcoding” in their titles, Firestone teaches format compatibility between multiple end users with various devices applying different codecs. Specifically, Firestone teaches that “media transformers (e.g. transcoders, transraters, and composition services) may be included in conferences to provide the relevant media services. These can be used as a media bridge, for example. “A conference supporting multiple speeds/formats could be supported.” Ex. 1008, ¶[0027].

A review of the paragraphs from Firestone relied upon by the Petition supports this conclusion. For example, Firestone teaches the use of “a video transcoder due to codec incompatibilities.” *Id.*, ¶[0029]. Firestone further teaches that:

[a] policy director may also be provisioned to provide the policy to individual end points, specifying what type of end point video customization is allowed (e.g. number and types of windows). This may have a direct bearing on how much bandwidth reservation the end points may be allowed to request.

Id., ¶[0032]. The specification of allowable end point video customization relates to formatting and codec controls. Further, the fact that policy decisions “may have a direct bearing on how much bandwidth reservation” is required does not convey a teaching that media transformers are acting “based on available bandwidth” but rather that bandwidth requirements may be altered. *Id.* Paragraph 34 of Firestone discloses list transformers with a brief functional description, but the paragraph itself does not teach performing a media switch “based on available bandwidth.” Lastly, paragraphs 108 and 109 disclose the existence of “bandwidth spike[s]” resulting from “video source switching” and architecture for “resource reservation” during “video switching.”

Thus, the Petition fails to establish that Firestone teaches “automatically configured to select a transcoding based on available bandwidth” as recited in 1[f]. Accordingly, Ground 2 fails and the Board should deny institution.

IV. The Board Should Deny Institution Under 35 U.S.C. § 314

Under the *Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation* (June 21, 2022) (“Interim Procedure”, Ex. 1037), *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (Mar. 20, 2020) provides the basis for a discretionary denial in this case. This Petition does not “present[] compelling evidence of unpatentability” with the Petition failing to provide a “compelling, meritorious challenge[]” that is “unrebutted [at] trial.” Ex. 1037, 2, 4. A discussion of each factor is outlined below.

A. Factor 1: Potential Stay

Petitioner has not motioned for any stay in the Parallel Proceeding, nor has the judge issued a stay. While the Board should “not attempt to predict how the district court in the related district court litigation will proceed,” this does not preclude the Board from denying institution. *Sand Revolution II, LLC v. Continental Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24 at 7 (PTAB Jun. 16, 2020). Petitioner cites *Sand Revolution* as a rationale for the Board to grant institution under Factor 1. Petition, 100. However, this citation is not a precedential decision and should not be held out as binding on the Board. Additionally, in *Sand Revolution*, the issue of the concurrent stay was not the only factor used in the analysis in the Board reaching their decision to grant institution. The other factors weighed heavily in favor of granting institution. *See Sand Revolution*, Paper 24 at

9–12. As such, considering the availability for Petitioner to file for a stay in light of the upcoming claim construction hearing in March (originally set for December 1, 2023), and deciding not to pursue the stay, this factor weighs in favor of denying institution.

B. Factor 2: Trial Date

The trial in the Parallel Proceeding will commence no later than September 2024, *see* Ex. 1038, 1, which is at most five months before the due date of a Final Written Decision of this Petition. Petitioner waited seven months after receiving the initial infringement contentions to file their Petition. Patent Owner has amended infringement contentions with leave of the Court pursuant to facts learned through discovery exchanges, depositions, and other publicly available material and will submit final contentions in line with the District Court’s schedule. The Board’s final written decision, if instituted, likely will be due on or around February 2025, which is after the close of fact and expert discovery (closing May 1, 2024 and June 10, 2024, respectively) and after the deadline for dispositive motions (June 17, 2024). *See BOE Tech. Grp. Co., Ltd., Beijing BOE Display Tech. Co., and Motorola (Wuhan) Mobility Tech. Comm. Co., Ltd., v. Element Capital Commercial Co. PTE. Ltd.*, IPR2023-00808, Paper 9 at 21–22, 34 (PTAB Nov. 15, 2023) (denying institution since the trial date was set to occur 6 months prior to the deadline for a FWD). Petitioner offers nothing in the form of evidence to show any trial date later

than the agreed upon September 23, 2024 date. *See BOE*, Paper 9 at 21. The median time to trial for the Eastern District of Texas, Marshall Division for the past five years is nineteen months. Ex. 2002. Even if the Board ignores the agreed upon trial date of September 23, 2024, the trial date would still occur on or around September 2024 which is before the statutory deadline for the FWD.

Since a stipulated trial date, as agreed by both parties in the district court case, will commence before the deadline to the FWD, then factor two weighs against institution. *See Ex. 1037*, 8–9 (analyzing the proximity of the trial date is not the sole factor, but if other factors weigh in favor of denial then the proximity to trial should be taken into consideration).

C. Factor 3: Investment in the Parallel Proceeding

The parties have invested a considerable amount of time and effort in the Parallel Proceeding. The suit was filed over a year ago in the Eastern District of Texas, Marshall Division on September 30, 2022. *STA Group LLC v. Motorola Solutions, Inc.*, No. 2-22-cv-00381-JRG-RSP (E.D. Tex. Sep. 30, 2022). The defendant moved for partial dismissal of the complaint by alleging that the '802 Patent claims ineligible subject matter and that the complaint fails to plausibly allege infringement. The court denied the motion to dismiss on August 11, 2023 by Judge Gilstrap, with Magistrate Judge Payne recommending denial on July 7, 2023. Further, fact discovery is well underway. While Petitioner alleges that the Petition

was filed with diligence, this Petition was filed approximately six weeks before the statutory bar would have prevented filing of the Petition and seven months after service of preliminary infringement contentions. Petition, 101. To that end, both parties have already expended extensive time and resources in fact discovery preparing for the District Court proceeding. The Claim Construction hearing in the District Court case is set for March 15, 2024. Ex. 1038, 3. Both Petitioner and Patent Owner have submitted extensive briefing related to Claim Construction.

Based on this record, the case is beyond its infancy, and the parties are considerably invested in the district court proceedings as depositions are already underway. Accordingly, this factor weighs against institution.

D. Factor 4: Issue Overlap

Petitioner has neither stipulated to, nor suggested it would stipulate to, any agreement related to issues raised in the Petition not being raised in the Parallel Proceeding. In the Interim Guidance, the director stated that “the PTAB will not discretionarily deny institution in view of parallel district court litigation where a petitioner presents a stipulation not to pursue in a parallel proceeding the same grounds or any grounds that could have reasonably been raised before the PTAB.” Ex. 1037, 3 (citing *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020) (precedential as to § II.A)). Absent a stipulation, this factor weighs against institution or is at least neutral.

E. Factor 5: Party Overlap

Petitioner and Patent Owner are both parties in the Parallel Proceeding. This factor weighs against institution. *See Fintiv*, Paper 11 at 13–14.

F. Factor 6: Other Circumstances Favoring Institution

When the sum of *Fintiv* factors 1-5 favor denying institution, which they do here, the PTAB considers whether the Petitioner presents a challenge with compelling merits. *Samsung Elecs. Co., Ltd. v. Cal. Inst. Of Tech.*, IPR2023-00130, Paper 10 at 15 (PTAB May 4, 2023) (citing Ex. 1037, 4–5). That analysis is provided in Section III above and clearly demonstrates that the Petition fails to satisfy the heightened standard that “it is highly likely that the petitioner would prevail with respect to at least one challenged claim.” *OpenSky Indus., LLC v. VLSI Tech. LLC*, IPR2021-01064, Paper 102 at 49 (PTAB Oct. 4, 2022) (precedential) (quoting Ex. 1037, 4); *see also Samsung Elecs.*, Paper 10 at 21 (“The ‘compelling merits’ standard is a standard higher than that required for institution.”) (citing *CommScope Techs. LLC v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23 at 3 (PTAB Feb. 27, 2023)). Accordingly, this factor also weighs against institution.

In view thereof, *Fintiv* Factors 1 (the lack of a stay entered in the district court litigation), 2 (proximity of the court’s trial date to the Board’s projected statutory deadline), 3 (investment in the parallel proceeding by the court and parties), 4 (overlap of issues in Petition vs. parallel proceeding and a lack of a stipulation), 5

(party overlap), and 6 (lack of merits in the petition) weigh in favor of denying institution.

V. Conclusion

Based on the above analysis, neither Ground 1 nor 2 of the Petition establish a reasonable likelihood of success because the referenced art fails to teach or disclose limitation 1[f], 8[f], and 12[f]. Of the remaining Challenged Claims, each depends from 1, 8, or 12. Accordingly, the arguments above apply because the cited references do not render obvious at least limitation 1[f]. Further, there is a sufficiently supported basis for the Board to exercise its discretion and deny institution in light of the parallel proceedings.

Dated: December 21, 2023

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Certification of Word Count Under 37 C.F.R. §42.24(d)

The undersigned hereby certifies that the foregoing contains 6,213 words according to the word count of the word-processing software used to prepare the foregoing.

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CERTIFICATE OF SERVICE

I hereby certify that on December 21, 2023, a true and correct copy of the foregoing was caused to be served electronically on the following counsel of record for Petitioner at the following email addresses:

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