

APPENDIX C

Infringement of U.S. Patent No. 8,903,307**By the Volkswagen Group**

Volkswagen Group automobiles provide an infotainment console that infringes the '307 patent, for example claim 11. Many recent Volkswagen and Audi automobile models integrate HD Radio™, SiriusXM®, Apple CarPlay™ running Apple Music streaming services playing live radio such as Beats 1 or Apple Music 1, or other platforms into the head unit with functionality claimed in the '307 patent, for example claim 11. These platforms are available in many Volkswagen models (*e.g.*, the Atlas, Beetle, CC, Golf, Jetta, Passat, Tiguan, and Touareg), as well as many Audi models (*e.g.*, the A3, A4, A5, Q5, S3, TT, A6, A7, A8, and Q8), which may have HD Radio™, SiriusXM®, CarPlay™, or a similar platform integrated or retrofitted.^{1,2} These platforms include the iTunes tagging functionality which enables a user to use the console to “tag” a song being broadcast correlating identifying data and media content for presentation, thereby infringing the '307 patent, for example claim 11.

¹ Data from HD Radio VW page, accessed on October 13, 2020 at https://hdradio.com/new_car_manufacturer/vw-2/

² Data from HD Radio Audi page, accessed on August 10, 2020 at https://hdradio.com/new_car_manufacturer/audi/.

Claim		Volkswagen Audi A3 Tagging and HD (third party) Radio
11.Pre	A system for correlating media content identifying data with at least one broadcast segment received by a communication device, the system comprising	<p><i>The Volkswagen Head Unit console includes an HD Radio and/or SiriusXM Radio accessory which has iTunes Tagging functionality. The radio accessory is capable of receiving audio broadcasts and accompanying data streams including song identifying information like song title and artist, as well as information identifying the broadcast station. The Head Unit is capable of extracting data from the data stream and saving this information for songs tagged using the iTunes Tagging feature.</i></p> <p>See:</p> <ul style="list-style-type: none"> - VW Audi A3 Owner's Manual, pp. 206-207.³ - iTunes Tagging online documentation, July 2010, p. 1.⁴
11.a	a receiver configured to receive a broadcast stream comprising the at least one broadcast segment and associated media content,	<p><i>The Volkswagen Head Unit console includes a radio receiver for use with HD Radio and/or SiriusXM Radio, capable of receiving a radio broadcast including one or more audio songs.</i></p> <p>See:</p> <ul style="list-style-type: none"> - VW Audi A3 Owner's Manual, pp. 206-207. - iTunes Tagging online documentation, July 2010, p. 1.
11.b	the receiver further configured to receive a data stream associated with the broadcast stream, the data stream comprising, at a minimum, the media content identifying data, wherein the media content identifying data	<p><i>The Volkswagen Head Unit Console radio receiver is capable of receiving a data stream carrying information identifying the broadcast songs. Per HD Radio and iTunes Tagging functionality protocols, the data stream includes the song title and artist, information identifying the broadcast station, and Apple product information.</i></p> <p>See:</p> <ul style="list-style-type: none"> - VW Audi A3 Owner's Manual, p. 207. - iPod Accessory Protocol Interface Specification Appendix D, 2009, p. 464. - iTunes Tagging documentation, July 2010, p. 2. - HD Radio Air Interface Design Description – Program Service Data, p. 10.

³ <https://bordbuch-online.audi.de/AudiBordbuch/docs/2c91f63c-4949-4fd6-b0c7-b62561b597f8/206/#zoom=z> (VIN No. WAUAUGFF3LA006674)

⁴ https://web.archive.org/web/20100705044543/images.apple.com/itunes/tagging/pdf/itunes_tagging.pdf

	comprises at least one element;	
11.c	at least one computer processor configured to extract the media content identifying data from the data stream, associating each media content identifying data element with at least one of a plurality of media content;	<p><i>The Volkswagen Head Unit Console includes a processor capable of extracting the relevant data from the data stream received with an audio broadcast of a song. The Head Unit Console is capable of extracting a song title and artist of a currently playing song on HD Radio or SiriusXM and displaying these on a display while the song is playing.</i></p> <p><i>See:</i></p> <ul style="list-style-type: none"> - “Audi to Globally Roll Out NVIDIA Tegra Visual Computing Module This Year,” posted Jan. 8, 2013.⁵ - iPod Accessory Protocol Interface Specification Appendix D, 2009, p. 465-66. - HD Radio Air Interface Design Description – Program Service Data, p. 10.
11.d	an electronic memory of the communication device configured to store, at a minimum, media content identifying data elements into identifying data aggregates, each identifying data aggregate associated with at least one of the plurality of media content and the at least one broadcast segment,	<p><i>The Volkswagen Head Unit Console includes functionality for use of the iTunes Tagging feature with HD Radio and/or SiriusXM. The Volkswagen Head Unit Console is capable of storing extracted data like the song title, artist, broadcast station, and Apple product information in a memory of the console in response to a user “tagging” a currently playing song. The Volkswagen Head Unit Console is capable of storing a list of tagged songs accessible by a user through the console display and storing Apple “tokens” to be downloaded to a compatible device to allow the user to access and purchase the tagged songs in iTunes.</i></p> <p><i>See:</i></p> <ul style="list-style-type: none"> - VW Audi A3 Owner’s Manual, p. 207. - HD Radio Air Interface Design Description – Program Service Data, p. 10. - iPod Accessory Protocol Interface Specification Appendix D, p. 463-65. - “HD Radio™ Technology – iTunes® Tagging.”⁶

⁵ <https://nvidianews.nvidia.com/news/audi-to-globally-roll-out-nvidia-tegra-visual-computing-module-this-year-6622721>

⁶ <https://hdradio.com/broadcasters/engineering-support/itunes-tagging-support/>

11.e	wherein the at least one broadcast segment is corollary to the at least one of the plurality of media content; and	<p><i>The HD Radio and/or SiriusXM radio broadcasts may include multiple songs or other radio programming. The songs broadcast over HD Radio and/or SiriusXM come from, and are logically associated with, the radio broadcast.</i></p> <p>See:</p> <ul style="list-style-type: none"> - HD Radio Air Interface Design Description – Program Service Data, p. 10. - “HD Radio™ Technology – iTunes® Tagging.”
11.f	an output configured to present at least a portion of the data elements stored in the electronic memory of the communication device to provide selective outputting using an interface of at least one of the following:	<p><i>As described above, the Volkswagen Head Unit Console is capable of saving information identifying the user-tagged songs to memory, and the list of user-tagged songs is accessible by the user through the console display. Further, the Volkswagen Head Unit Console is capable of transferring Apple “tokens” representing the list of tagged songs to a compatible Apple device through a USB port connection.</i></p> <p>See:</p> <ul style="list-style-type: none"> - VW Audi A3 Owner’s Manual, p. 207. - iPod Accessory Protocol Interface Specification Appendix D, p. 464-465.
11.g	the media content identifying data, the media content, the corollary broadcast segment, a temporal position of the corollary broadcast segment of the broadcast stream.	<p><i>The Volkswagen Head Unit console is capable of displaying to the user as part of the tagged songs list, the artist and song title, and is also capable of exporting to a connected apple device Apple “tokens” the include an indication of the tagged song for future use by the user in purchasing the song in iTunes.</i></p> <p>See:</p> <ul style="list-style-type: none"> - iPod Accessory Protocol Interface Specification Appendix D, p. 464-465.