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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

Max Volume

Application No.: 17/000,000

Filed: March 29, 2019

For: SYSTEM AND METHOD FOR  
STORING AUDIO DATA ON A  
STREETLIGHT APPARATUS  
AND OUTPUTTING STORED  
AUDIO DATA ON SAME

Examiner: Daniel Nile

Group Art Unit: 3683

Attorney Docket No.: 1776

Confirmation No.: 1234

AMENDMENT

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Examiner Nile:

This Amendment is in response to the Office Action mailed April 5, 2019. This Amendment is timely because it is being submitted within the period for reply which expires July 5, 2019.

Please enter and consider the following:

- *complaint*
- *pretty good clarity of argument - clearest so far*
- *claims could still use work*

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### AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Be very clear what the "data" and the "values" are functionally and/or structurally

### LISTING OF CLAIMS

1. (Currently Amended) [[A]] [[an]] An audio signal emitting system of a streetlight apparatus, wherein said system includes:

a processor wherein said processor transmits audio data to be outputted;

a transceiver, wherein said transceiver is electronically connected

to said processor, electronically connected to said processor wherein said transceiver receives audio data, through a cellular data network, from an external server; and transmits audio data to and from an external server;

a memory electronically connected to said processor wherein said memory electronically stores audio data that is received by said transceiver and transmitted to said memory by said processor;

an internal clock electronically connected to said processor

wherein said internal clock transmits time values, wherein a particular time value, predetermined by said processor, relates to a time an audio

data is to be output by said audio signal emitting system, to said processor

when the processor requests said time values; and

based upon iterative count which is

wherein the generated time data is determined

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wherein said internal clock determines the generated time data based upon an iterative count wherein

wherein said ... cycle is determined by said processor

electronic conn  
= electronic  
transmission?

\* Make sure anything that says "associated" is paired w/ a structural or functional limitation

"Action" = automated audio file selection process

attached to a streetlight apparatus  
recite all of the "physical" & "electrical" connections

which represents a value of time counted

data, said time data is generated

Said internal clock generates said time data based upon an iterative count wherein said iterative count is based on a repeating 24 hour cycle, and the count wherein each iteration of the count is at least one second. increases the generated time data value by at least one second

a sound output device wherein said sound output device is electronically connected to said processor and mechanically connected to said streetlight apparatus, and wherein said sound output device receives, from said processor, audio data, wherein said audio data is already stored on said memory, and wherein said audio data is retrieved, by said processor, from said memory, ~~from said processor audio data,~~ wherein said sound output device generates, from said ~~emits the~~ audio data, an audio signal, wherein said sound output device outputs said ~~as an~~ audio signal.

2. (Original) The sound output device of claim 1, wherein said sound output device includes a speaker.
3. (Currently Amended) The sound output device of claim 1, wherein said sound output device includes an adaptor, wherein said adaptor is connected wired or wirelessly to [[said]] a speaker.
4. (Currently Amended) The adaptor of claim 3, wherein said adaptor receives [[the]] audio data from said processor and generates an audio signal from said audio data, wherein said adaptor transmits said audio signal to said speaker, wherein said speaker emits the audio signal.



an output time value, that an  
predetermined by said processor;

5. (Currently Amended) A method for transmitting audio data to, and storing audio data on, a streetlight, said method including:

transmitting, by a transceiver on a server, to a streetlight, a request for an audio file reference number stored on a memory of said streetlight,

wherein said request is transmitted at a time value, wherein said time

value is a time of day, before a predetermined time value that a particular

audio data corresponding to a particular audio file reference number is to

be output, wherein said particular audio data is stored on said memory of

said streetlight before the predetermined time value it is to be output at

sound emitting apparatus;

receiving, by a transceiver on said streetlight, said request for said audio file reference number;

transmitting, by said transceiver on said streetlight, said request for said audio file reference number to a processor on component of said streetlight;

retrieving, by said processor, from a memory on [[of]] said streetlight, the audio file reference numbers stored on the memory of said streetlight;

transmitting, by said transceiver on said streetlight, said audio file reference numbers to said transceiver on said server;

at least 4  
5 min = 200 sec

Need to maintain that the request is sent at this time value i.e., the 5 min before the ad is to be played

time value, predetermined by said processor

time value, predetermined by said processor

said audio data

based upon an iterative count wherein each iteration of the iterative count increases the data value of the generated time data by at least one second, wherein the iterative count starts at a data value of "0" determined by the processor and increases each iteration increases the data value generated by the iterative count by at least one second until the iterative count data value of the iterative count reaches seconds, which is a data value predetermined by the processor, wherein the iterative count stops and then repeats

comparing, by said processor on said server, the received audio file reference numbers from the streetlight to an audio file reference number associated with an audio data [[file]] stored on said server on a memory of said server;

determining, by said processor on said server, whether an audio file reference number within the received audio file reference numbers matches the audio file reference number associated with the audio data [[file]] stored on said server memory;

transmitting, by said transceiver of said server, to said transceiver of said streetlight, an audio data [[file]] associated with an audio file reference number which did not match an audio file reference number within the received audio file reference numbers and an audio file output command, wherein said transmitted audio data [[file]] is stored on streetlight memory by said streetlight processor;

transmitting, by said transceiver of said server, to said transceiver of said streetlight, an audio file output command when an audio file reference number within the received audio file reference ~~references~~ numbers matches an audio file reference number associated with an audio data [[file]] on said server; and

storing, by said processor on said streetlight, said audio data [[file]] and associated audio file reference number, before a time value when said

audio data is to be output, on said streetlight memory when said audio data [[file]] is associated with an audio file reference number which is not associated with an audio data [[file]] already stored on the streetlight memory.

6. (Currently Amended) The method of claim 5, wherein said audio data [[files]] include MPEG-1 Audio Layer III (MP3) files.

7. (Original) The method of claim 5, wherein said streetlight includes a speaker.

8. (Currently Amended) The speaker of claim 7, wherein said speaker outputs said audio data [[file]] as sound-waves generated from an audio signal.

9. (Currently Amended) The method of claim 5, wherein the audio file output command is sent no more than five minutes before the audio data [[file]] is to be outputted, and no less than the instant before the audio data [[file]] is to be outputted.

10. (Currently Amended) The method of claim 5, wherein said server includes a memory, wherein said memory includes a set of audio data [[files]] to be



outputted, said audio data ~~[[files]]~~ including new audio data ~~[[files]]~~ not already stored on said streetlight.

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) An audio signal output system, said system including:

a streetlight, wherein said streetlight includes a speaker, wherein said speaker outputs a sound-wave, wherein said sound-wave is generated from an audio file; which includes a speaker, outputs an audio-based sound-wave output generated from an audio file;

a memory, wherein said memory stores audio files, wherein said stored audio files correspond to an associated audio file reference number;

an internal clock, wherein said internal clock generates time values, and transmits said time values, wherein said time value is

a particular time of day said time value is generated at, to said processor when the processor requests said time values; and

a processor, wherein said processor receives ~~[[a]]~~ an audio file output command, which is received by a transceiver, and transmitted by

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Wherein said processor, upon receiving AFOC, ~~where received by said processor,~~ processor initiates, ~~upon receiving said AFOC,~~ after ~~the~~ transmission of a request by said processor to said internal clock for a time value, wherein when said current time value ~~is~~ is generated by said internal clock and transmitted to said processor.

for said internal clock to generate a current time value, wherein when the current generated time value is equivalent to a time value on the AFOC, a command sequence...

said transceiver to said processor, wherein said audio file output command

is a set of code which, when received by said processor, initiates, when

said processor receives from said internal clock a time value which is

equivalent to the time value included on the audio file output command, a

command sequence causing ~~indicates to said processor a command for~~

said processor to retrieve an audio file from said memory with an audio

file reference number associated with said audio file output command,

wherein said processor performs an audio file conversion function to

generate, from said audio file, an audio signal, wherein said processor

transmits [[to]] said audio signal to said speaker; and

[[the]] ~~said speaker~~, wherein said speaker receives said audio

signal, wherein said speaker generates at least one sound-wave output

based on from said audio signal, wherein said at least one sound wave is

output by said speaker.



**REMARKS**

The present application includes claims 1-13. Claims 1-13 were rejected. By this Amendment, claims 11-12 have been canceled, claims 1, 3-6, 8-10, and 13 have been amended.

*Left reflections?*

Claims 1-13 were rejected under 35 U.S.C. § 112(b) as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor regards as the invention. More specifically, in Claim 1, the claim starting with "A an". Claim 1 has been amended to correct this punctuation error. Additionally, in Claim 1 recited a transceiver that "receives and transmits audio data to and from". Claim 1 has been amended to recite a transceiver that "receives audio data, through a cellular data network, from an external server". Additionally, Claim 1 recited "time values", which the Examiner regarded as vague or an abstract principle. The section of the claim relating to "time values" has been amended to recite: "time values, *wherein a particular time value, predetermined by said processor, relates to a time an audio data is to be output by said audio signal emitting system,*" to cure the Examiner's concerns. Additionally, Claim 1 recited "from said processor audio data". Claim 1 has been amended to recite "from said processor, audio data" – a comma was added between "processor" and "audio data" to correct the clarity concern raised by the Examiner.

Claim 5 recited "said sound emitting apparatus", which the Examiner rejected for lack of antecedent basis. Claim 5 has been amended to remove the phrase "said sound

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emitting apparatus" thereby curing the lack of antecedent basis rejection. Additionally, Claim 5 recited "said processor", which the Examiner rejected for lack of antecedent basis. The proper antecedent introduction of "processor" is established by the deletion of the conflated "component", the word which caused the antecedent basis concern. ✓

Claim 13 recited "a speaker" and then recited that audio is output by a streetlight rather than a speaker. Claim 13 has been amended to recite a streetlight that contains a speaker, and that the audio is output by the speaker, which is on the streetlight. ✓  
Additionally, Claim 13 recited "a audio file output command". Claim 13 has been amended so that the "a" has been deleted and replaced with an "an" to correct the grammatical error. Additionally, Claim 13 recited "indicates". Claim 13 has been amended to delete the term "indicates", thereby correcting the matter. Additionally, Claim 13 recited "transmits to said audio signal to said speaker". Claim 13 has been amended by deleting the first "to" in the recited phrase, thereby correcting the grammatical matter. Claim 13 recited "the speaker" at the end of the claim. "The speaker" has been amended to "said speaker" to cure the Examiner's claim limitation concern. The remaining claims identified in this rejected were included due to their dependence from Claims 1, 5, or 13. Consequently, Independent Claims 1, 5, and 13, as amended are respectfully submitted to be in compliance with 35 U.S.C. §112(b), as are their respective dependent claims 1-4, and 6-10.

*Space*  
*file* → Claims 1-13 were rejected under 35 U.S.C. §102(a)(1) as being anticipated by Lee, U.S. Pat. App. Pub. No. US 2018/0324486. Lee teaches an audio output system that ✓

determines when and how to transmit different audio signals to two, mutually exclusive, devices so that the two devices may concurrently output the two different audio signals, or so that one device may output the two signals at once. This system is best described in the section of Lee beginning in Paragraph [0152] and ending in Paragraph [0170]. In this section the system describes the transmission of audio signals based upon a priority set by a user. The priority determination in this system is based upon, and initialized, when a *non-predetermined* event occurs, such a call event, as specifically described in Paragraphs [0156-160]. These non-predetermined events do not occur based on at a time of day or at a time value which has been predetermined by any part of the system.

Furthermore, Lee does not teach a clock element.

Space → Claims 1-13 include Independent Claims 1, 5, and 13. Claim 1 recites an internal clock which is on the streetlight. The streetlight internal clock generates time values regarding a time of day for the processor when the processor requests that time information from the internal clock. Lee does not teach the use of an internal clock at any point in its system. Lee does teach, in Paragraph [0113] a "clock function 384". This clock function 384 is a constituent, electronic, element of a software application, and is a *function* or *program*. The "clock *function* 384" in Lee is not equivalent to the internal clock in Claim 1. The "clock function 384" is itself undefined.

Space → Claim 5 has been amended to recite that a transmission occurs before a predetermined time value when an audio data is to be output. This predetermined time value and output regards an output event which is already determined in the system.



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Claim 5 recites the transmission and storage of the audio data before the predetermined time at which the audio data is to be output at. Lee teaches a spontaneous audio signal output and transmission system.

Claim 13 has been similarly amended to recite an internal clock, where the internal clock generates time values and transmits a time value when the processor requests the time value from the internal clock. Claim 13 has been amended to recite that the processor determines whether the time value generated by the internal clock is equivalent, or "is," the time value referencing the time of day that an audio data is to be output at. When these time values are equivalent the output of the audio data occurs. This audio data output is predetermined by the system and that determination is not based upon a spontaneous event as in Lee, as seen in Paragraphs [0152-0170]. Furthermore, Lee does not teach an internal clock. Lee teaches a "clock function 384," but does not define what that "clock function 384" is. ✓

Consequently, Independent Claims 1, 5, and 13 are respectfully submitted to be free of the prior art and allowable, as are their respective dependent claims 2-4 and 6-10.

Claims 1-13 were rejected under 35 U.S.C. §102(a)(1) as being anticipated by Hwang, U.S. Pat. App. Pub. No. US 2019/0098444. Hwang teaches a data transmission method and apparatus wherein the transmission method describes the transmission of data to and from the apparatus based upon the apparatus' location in regard to a transmitter 410. This is best shown by paragraphs 96, 126, and 135, which describe illustrations of a system, detailed by paragraph 96, and a method associated with that

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rejection

system, paragraphs 126 and 135 both referencing the same process and are complete copies of one another except for differences in parenthetical references to other parts of the patent application and a few different word choices.

These cited paragraphs are illustrative of the *differences* in the teachings of Hwang and the claims as presently amended, the specific claims relating to paragraphs 96, 126, and 135 being Claims 1 and 13. Hwang teaches the transmission of data which is output by the apparatus as being dependent on the location of the apparatus in relation to a transmitter 410, i.e. the content output by the speaker in Hwang is dependent on the data received by the apparatus in Hwang, that received data itself depending on the specific distance the apparatus is from a specific transmitter 410. The data received by the apparatus that is outputted is received by the apparatus from a server 420. The server 420 is external to the apparatus and the transmitter 410, and transmits the data (and thereby the associated service information or content to be outputted) to the apparatus once the apparatus *communicates* to the server 420 when the apparatus is within *a certain distance* from a transmitter 410, and that when the apparatus is within a certain distance that is when such a transmission occurs. Independent Claims 1 and 13 have been amended to reference the receipt of audio data, and the outputting of audio data or, more specifically, the sound-waves generated from the audio data in relation to a specific *time value* or *time when* audio data is to be received or outputted. Hwang does not describe a system or method of outputting sound, or service information or content, based on *time*. Claims 1 and 13 have been amended to recite a time aspect.

Independent Claim 5 relates to a method for transmitting audio data that is not already on a streetlight and storing that audio data on the streetlight. Hwang, in paragraphs 96, 126, and 135, all teach, independently and with using the same words, a system or process of transmitting data that is displayed by the apparatus once it is received. Conversely, Claim 5 recites a method for determining whether a particular audio data is already stored on a particular streetlight, and if it is determined that the particular audio data is not already stored on the particular streetlight, then the audio file is transmitted to the streetlight and stored on the memory located on the streetlight. The audio data is not outputted once it is stored on the streetlight. Claim 5 claims a transmission and storage process *not* taught by Hwang. Hwang teaches:

In Hwang Claim 1: the storage of the location information relating to the apparatus;

In Paragraph [0009] the storage of the location information relating to the apparatus;

In Paragraph [0028] the storage of generic software programs which may exist on the apparatus;

In Paragraph [0039] the storage of information related to other elements of the apparatus itself, or software/programs that exist on the apparatus itself;

In Paragraph [0051] the storage of instructions from other elements on the apparatus itself;



In Paragraph [0102] the storage of the location information relating to the apparatus;

In Paragraph [0176] the storage of general computer programming;

In Paragraph [0177] the storage of computer program instructions; and

In Paragraph [0178] the storage of instructions for the transmission of service information by the apparatus, but not the storage of the service information *or even* the storage of instructions for storing any service information.

In fact, Hwang does not teach the storage of the service information, sounds, or content that Hwang purports to be outputted *or even for how* the service information, sounds, or content *is* output. Hwang's teaching are inapposite to Claims 1-13. ✓

Consequently, Independent Claims 1, 5, and 13 are respectfully submitted to be free of the prior art and allowable, as are their respective dependent claims 2-4 and 6-10.

> In conclusions — try to remember Star Trek engine ejection points

→ you have to really explicitly say "this is why the prior art doesn't work as a rejection? why"  
> point it out very explicitly to the examiner

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**CONCLUSION**

If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of 1776, Account No. 1776.

Respectfully submitted,

Date: April 12, 2019

/1776/

1776

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