

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of:

Ronin Tate

Application No.:

17/000,000

Filed:

March 30, 2018

For:

SYSTEM AND METHOD FOR

REMOTE AUTOMATED DETERMINATION OF

DISPLAY

Examiner:

Daniel Nile

Group Art Unit:

3683

Attorney Docket No.: 92606

iorney Bocker 110. 3200

Confirmation No.:

1234

confluent

AMENDMENT

Mail Stop AF 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 20, 2018. This Amendment is timely because it is being submitted within the period for reply which expires July 20, 2018. Please enter and consider the following:

AMENDMENTS TO THE CLAIMS

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

LISTING OF CLAIMS

 (Currently Amended) A remote, automated determination of display system, said system comprising:

a central server including a data storage unit storing a display image data, a location center point data, and a location radius data;

a smartphone including a GPS, wherein said smartphone is in a wireless connection with said central server, wherein a current GPS location data representing GPS coordinates of said smartphone is transmitted to said central server;

a LED display system including a light display, wherein said LED display system is in a wireless communication with said smartphone;

wherein said central server transmits said display image data to said smartphone to be displayed on said LED display system when said smartphone is located within a geographic area, wherein said geographic area is a circular geographic area with a radius represented by said location radius data, surrounding a center point represented by said location center point data, wherein said smartphone is located within a geographic area when said current GPS location data representing GPS coordinates of said smartphone that is transmitted to said central server is compared to said location center point data

representing GPS coordinates, and value representing distance between the two

coordinates is less than said location radius data in value;

wherein said display image data representing a visually-perceptible image sent

from said central server is transmitted to said light display for image processing. Voque

- (Original) The system of claim 1, wherein said LED display system is bicycle spokes LED lights.
- (Original) The system of claim 1, wherein said display image data communicated between said smartphone and said LED display system includes a Bluetooth signal.
- (Original) The system of claim 1, wherein said display image data is in
 JPEG format, PNG format, AVI format, or MOV format.
- (Original) The system of claim 1, wherein said data storage unit includes a
 plurality of stored display image data.
- (Original) The system of claim 1, wherein said system includes a plurality of smartphones.

7. (Currently Amended) A remote, automated determination of display system for transmitting display image data based on time and location, said system comprising:

a central server including a data storage unit storing a display image data, a location center point data, a location radius data, a start time data, and an end time data;

a smartphone including a GPS, wherein said smartphone is in a wireless connection with said central server, wherein GPS coordinates of said smartphone is transmitted to said central server, wherein said central server records data representing time said GPS coordinates were was received as a current time data, wherein data representing time is determined by an internal clock in said central server;

a LED display system including a light display, wherein said LED display system is in a wireless communication with said smartphone;

wherein said <u>central</u> server transmits said display image data to said smartphone to be displayed on said LED display system when said current time data is between said start time data and said end time data in value, and said smartphone is located within a geographic area, wherein said geographic area is a circular geographic area with a radius represented by said location radius data, surrounding a center point represented by said location center point data, wherein said smartphone is located within a geographic area when said current GPS location data representing GPS coordinates of said smartphone that is transmitted to said central server is compared to said location center point data

representing GPS coordinates, and value representing distance between the two coordinates is less than said location radius data in value;

wherein said display image data representing a visually-perceptible image sent from said central server is transmitted to said light display for image processing.

- (Original) The system of claim 1, wherein said LED display system is bicycle spokes LED lights.
- (Original) The system of claim 1, wherein said display image data communicated between said smartphone and said LED display system includes a Bluetooth signal.
- (Original) The system of claim 1, wherein said display image data is in
 JPEG format, PNG format, AVI format, or MOV format.
- 11. (Original) The system of claim 1, wherein said data storage unit includes a plurality of stored display image data.
- 12. (Original) The system of claim 1, wherein said system includes a plurality of smartphones.

13. (Currently Amended) A method of remote, automated determination of display, said method comprising:

receiving GPS coordinates of a smartphone from said smartphone;

recording data representing time at which said GPS coordinates of said smartphone were was received as a current time data, wherein data representing time is determined by an internal clock in said central server;

querying a data storage unit in said central server for an advertiser display group file, wherein said advertiser display group file includes a display image data, a start time data, an end time data, a location center point data, and a location radius data;

transmitting said display image data from said advertiser display group file to said smartphone when said current time data is between said start time data and said end time data in value, and said smartphone is located within a geographic area, wherein said geographic area is a circular geographic area with a radius represented by said location radius data, surrounding a center point represented by said location center point data, wherein said smartphone is located within a geographic area when said current GPS location data representing GPS coordinates of said smartphone that is transmitted to said central server is compared to said location center point data representing GPS coordinates, and value representing distance between the two coordinates is less than said location radius data in value;

wherein said display image data representing a visually-perceptible image sent from said central server is transmitted to said light display for image processing.

- 14. (Original) The method of claim 13, further comprising transmitting said display image data from said smartphone to a LED display system, wherein said LED display system is in a wireless connection with said smartphone.
- 15. (Original) The method of claim 13, wherein said LED display system is bicycle spokes LED lights.
- 16. (Original) The method of claim 13, wherein said display image data communicated between said smartphone and said LED display system includes a Bluetooth signal.
- 17. (Original) The method of claim 13, wherein said display image data is in JPEG format, PNG format, AVI format, or MOV format.

REMARKS

The present application includes claims 1-17. Claims 1-17 were rejected. By this Amendment, claims 1, 7, and 13 have been amended.

Claims 1-17 were rejected under 35 U.S.C. §112(b) as being indefinite.

Claims 1-17 were rejected under 35 U.S.C. §102(a)(1) as being anticipated by Frier, U.S. Pat. App. No. 2014/0354419.

Claims 1-17 were rejected under 35 U.S.C. §102(a)(1) as being anticipated by London, U.S. Pat. App. No. 2018/0096585.

Claims 1-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lai, U.S. Pat. App. No. 2014/0203923, in view of Goldwater, U.S. Pat. App. No. 2012/0200301.

The Applicant now turns to the rejection of claims 1-17 under 35 U.S.C. §112(b). Claim 1 has been amended. An appropriate correction has been made to claim 1 in order to clarify the meaning of the limitation "when said smartphone is located within a geographic area." As amended, claim 1 recites "wherein said smartphone is located within a geographic area when said current GPS location data representing GPS coordinates of said smartphone that is transmitted to said central server is compared to said location center point data representing GPS coordinates, and value representing distance between the two coordinates is less than said location radius data in value."

Claims 2-6 depend from claim 1, which is respectfully submitted to be allowable.

Likewise, claim 7 and 13 have been amended in a parallel manner with the same language. Claims 8-12 depend from claim 7, which is respectfully submitted to be allowable. Claims 14-17 depend from claim 13, which is respectfully submitted to be allowable.

The Applicant now turns to the rejection of claims 1-17 under 35 U.S.C. §102(a)(1) as being anticipated by Frier, U.S. Pat. App. No. 2014/0354419. In Figure 12, Frier illustrates a lighting system 1201 coupled to a bicycle 1202. Described in paragraph 57, the lighting system 1201 includes a control unit 1204 that can receive input from connected devices, like a smartphone, or a plurality of sensors including rotational, proximity, light, and heat sensors and accelerometers mounted at appropriate locations on the bicycle 1202. The control unit 1204 controls the illumination means 1208A-1208L and "changes the color and behavior . . . of the illumination means 1208A-1208L based on information input from sensors or connected devices" (paragraph 57).

However, Frier does not teach an input data representing a visually-perceptible image that is transmitted from a central server to a smartphone, then to a light display for image processing. Moreover, Frier does not teach an input data representing a visually-perceptible image that is in JPEG format, PNG format, AVI format, or MOV format.

As amended, claim 1 recites an additional limitation supported by specification, as follows: "wherein said display image data representing a visually-perceptible image

the specification, paragraph 35 describes a central server 150, which transmits a display image data 163 to a network transceiver 102. The display image data 163 is then transmitted from the network transceiver 102 to a wireless transceiver 134 of a smartphone 130. According to paragraph 38, upon the display image data 163 being received at the wireless transceiver 134 of the smartphone 130, the display image data 163 is then relayed from the wireless transceiver 134 of the smartphone 130 to a wireless transceiver 142 of a LED display system 140. Upon the display image data 163 being received at the wireless transceiver 142 of the LED display system 140, the display image data 163 is stored in a memory unit 143 of the LED display system 140. The LED display system 140 retrieves the display image data 163 stored in the memory unit 143 of the LED display system 140 and sends the display image data 163 to the light display 141 for image processing (paragraph 38).

Thus, unlike Frier, which teaches an input from sensors or connected devices that triggers "changes...of illumination" on the illumination system, claim, I teaches a data input representing a visually-perceptible image that is directly sent to the light display for image processing. Furthermore, while Frier does not specify a format of input data, claim, 4 teaches a display image data that is in JPEG format, PNG format, AVI format, or MOV format that is processed at the light display for a visually-perceptible image.

Consequently, claim 1 is respectfully submitted to be free of Frier and allowable.

Additionally, claims 2-6 depend from claim 1 and thus include all the limitations of claim

1. Consequently, claims 2-6 are also submitted to be allowable. Likewise, claim 7 and 13 have been amended in a parallel manner with the same language. Claims 8-12 depend from claim 7, which is respectfully submitted to be allowable. Claims 14-17 depend from claim 13, which is respectfully submitted to be allowable.

The Applicant now turns to the rejection of claims 1-17 under 35 U.S.C. §102(a)(1) as being anticipated by London, U.S. Pat. App. No. 2018/0096585. London teaches an alarm system, where a control device communicates with a tag receiver 200 as shown in Figure 5A-15. Figures 1-4 illustrate various embodiments of control devices. Paragraph 91 discloses a tagged receiver 300 that comprises of an alarm light indicator 392, which may be an LED light, for transforming data signals from the control device 200 and/or the tagged receiver 300 into an illuminated signal in order to output visual alarm indications to the user. The alarm light indicator 292 on the control device 200 may similarly blink or remain lit when the control device 200 senses an alarm event that causes the alarm of a tagged receiver 300 to go off. Paragraph 53 recites that the control device 200 may be embedded within a mobile computing device.

However, similar to Frier, London does not teach an input data representing a visually-perceptible image that is transmitted from a central server to a smartphone, then finally to a light display for image processing.

As amended, claim 1 recites a display image data representing a visuallyperceptible image sent from the central server that is transmitted to light display for

the alarm light indicator 392 on the tagged receiver 300 is triggered by "data signals from the control device 200 and/or the tagged receiver 300" (paragraph 91). Unlike claim 1, the data signal disclosed in London is not a display image data that is later processed as a visually-perceptible image by the LED display system. In addition, London does not disclose a data signal that represents a display image data that is in JPEG format, PNG format, AVI format, or MOV format that is processed at the light display for a visually-perceptible image, as disclosed in claim 4.

Consequently, claim 1 is respectfully submitted to be free of London and allowable. Additionally, claims 2-6 depend from claim 1 and thus include all the limitations of claim 1. Consequently, claims 2-6 are also submitted to be allowable. Likewise, claim 7 and 13 have been amended in a parallel manner with the same language. Claims 8-12 depend from claim 7, which is respectfully submitted to be allowable. Claims 14-17 depend from claim 13, which is respectfully submitted to be allowable.

The Applicant now turns to the rejection of claims 1-17 under 35 U.S.C. §103(a) as being unpatentable over Lai, U.S. Pat. App. No. 2014/0203923, in view of Goldwater, U.S. Pat. App. No. 2012/0200301. Lai teaches an illumination apparatus 20 capable of receiving an image signal from an image data source 456 (paragraph 20). Paragraph 27 teaches an embodiment shown by Figure 6 having image data source 456 that includes

path guide system 456A and a position information device 456B. that can be a typical mobile communication device (paragraph 28). Paragraph 30 discloses a display apparatus 10 having an image data source 456 for outputting an image signal, a mounting device 789, and a projection device 123.

Goldwater teaches an electronic light display apparatus 100 attached to a forward wheel 201 of a bicycle 200 that can be in the form of LEDs mounted on one side of the wheel 201 (paragraph 31 and 35). Goldwater teaches a data user input circuitry 171, which can include buttons, an infrared receiver, a radio receiver, a serial port, a USB port, a combination thereof (paragraph 53).

Consequently, neither Lai nor Goldwater teaches a system, in which there is a remote, central server storing a display image data, and more specifically remotely stored data that is compared to another input data indicative of location of a smartphone at a certain time. Instead, the data disclosed in Lai is stored locally. All a locally at the local stored and the local stored and the local stored and local stored local stored and local stored and local stored local stor

Again, as amended, claim 1 recites "a central server including a data storage unit storing a display image data," which is transmitted "when said smartphone is located within a geographic area..." The smartphone is said to be located within a geographic area when "said current GPS location data representing GPS coordinates... is transmitted to said central server [then]... compared to said location center point data, and value representing distance between the two coordinates is less than said location radius data..." Thus, claim 1 discloses storage of data representing location in a data storage

unit at a remote, central server. The data is then retrieved and accessed to compare with another input data from a smartphone.

Furthermore, claim 7 discloses a central server including a data storage unit storing "a display image data, a location center point data, a location radius data, a start time data, and an end time data." The central server "records data representing the time the GPS coordinates from the smartphone was received as a current time data." The display image data is transmitted to the LED display system "when said current time data is between said start time data and said end time data..." Thus, claim 7 discloses storage of data representing time, in addition to location as disclosed in claim 1, in a data storage unit at a remote, central server. The data is then retrieved and accessed to compare with another input data from a smartphone.

Claims 1 and 13 have similar language of display image data having location specific limitations. Consequently, claims 1, 7, and 13 are respectfully submitted to be free of Lai and allowable. Additionally, claims 2-6 depend from claim 1, claims 8-12 depend from claim 7, and claims 14-17 depend from claim 13. Consequently, claims 2-6, 8-12, and 14-17 are also submitted to be allowable.

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 Mister Bank, Account No. 12345678.

Respectfully submitted,

Date:

April 13, 2018

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92606

Registration No. 92606

92606 111 Law Firm St Champaign, IL 61801

Telephone:

123-456-7899

Facsimile:

123-456-7899