

Image and video reproducing system on smartphone screens during public events



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PATENT STATUS : granted

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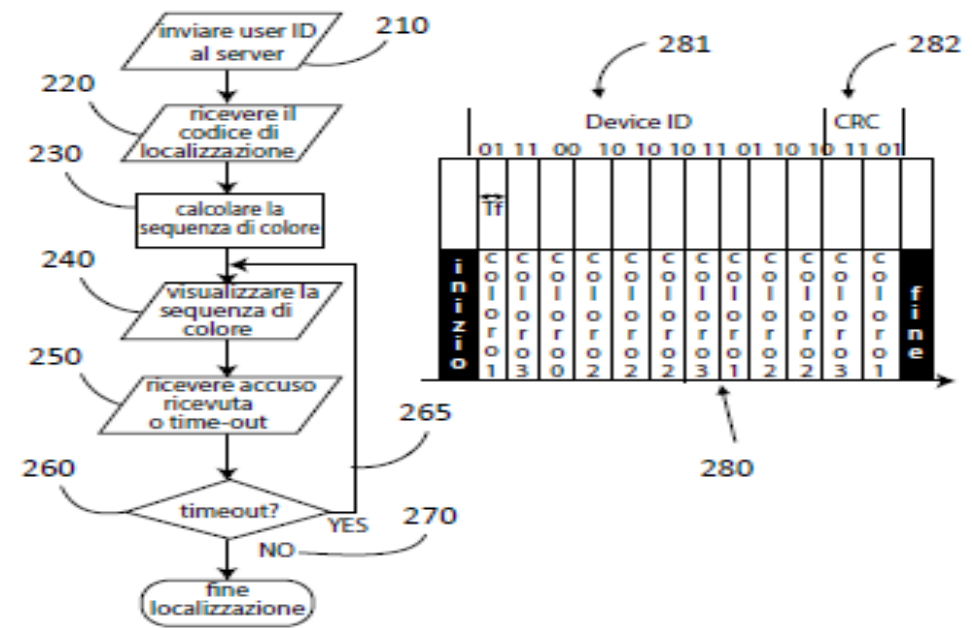
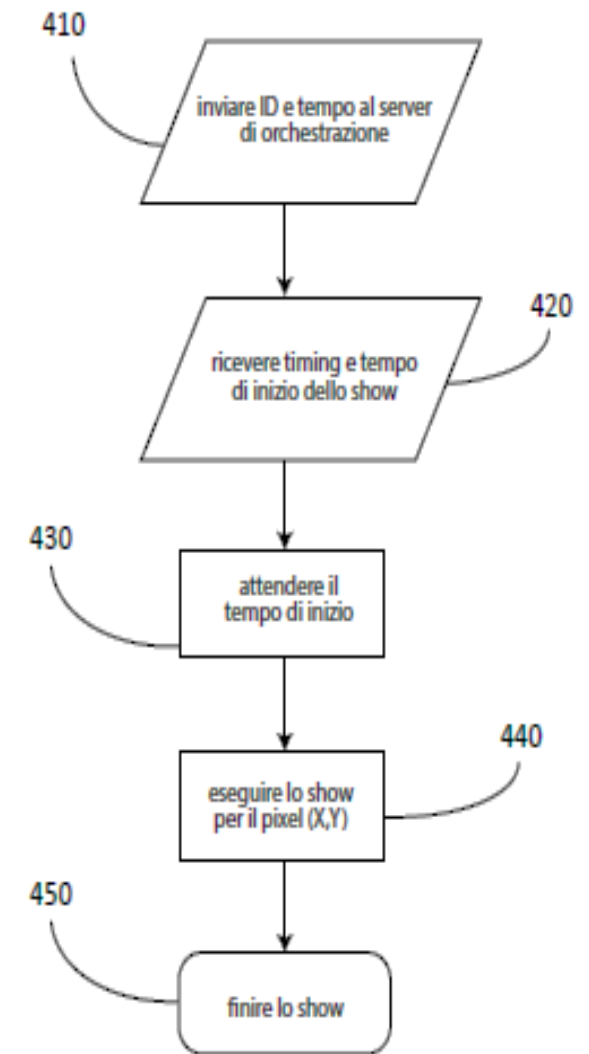
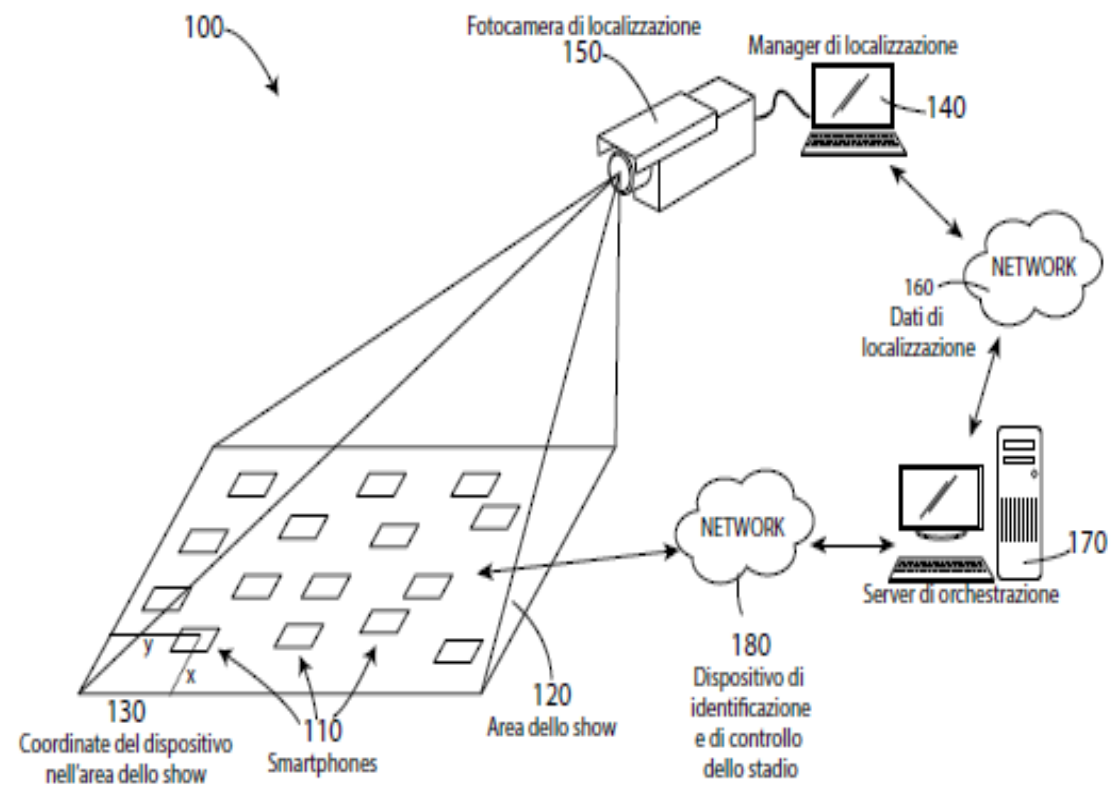
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Invention

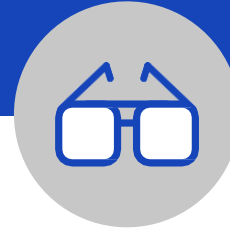


The use of systems to generate simple choreographies, graphic motifs, images and videos is common practice during public events. Nevertheless, these activities require the use of specific devices such as wands or luminous bracelets, needing localization and synchronization mechanisms that bind the devices, and consequently the individual participants, to predetermined positions. The proposed system represents a more flexible solution as it directly exploits the screens of the participants' smartphones to generate a given choreography, and adapts to their movements during the event, not requiring their prior position in the scene or their arrangement in space. After registration and localization of each device by means of a camera framing the event (e.g. a square) and a synchronization protocol between the individual devices and a management server, the system allows the reproduction of color graphics, even dynamic ones, on a virtual composite screen using the light of smartphones in highly variable contexts. The system is also independent of the arrangement by rows and columns of the devices, it allows you to determine the position of a given participant in the area as well as to locate friends in the area during the show.

Drawings & pictures



Industrial applications



The technology can be applied to Industry 4.0, within the technologies, networks, systems and communication, wireless and wired departments. It can be included in systems that allow the visualization of visual and digital patterns in outdoor or indoor events (sports, music concerts or other).

Possible developments



The research group is looking for industrial partners operating in the specified application areas and establish collaborations aimed at the technological maturation of the invention, improving the prototype and its adaptability for subsequent commercialization. The University of Siena is available to negotiate specific agreements for the technological maturation, license or option of the patent title linked to the invention.

For more information:



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