

12. The apparatus of claim **11**, wherein the one or more location sensors comprise at least one hover sensor and determination of the direction uses information from the at least one hover sensor.

13. The apparatus of claim **11**, wherein the one or more processors are further configured to cause the apparatus to perform at least the following: performance, by starting a first number of milliseconds before the moment and ending a second number of milliseconds after the moment, of the determination of the direction and the recognition of the one or more attributes of the acoustic signal made by the at least one object.

14. The apparatus of claim **13**, wherein the one or more location sensors comprises at least one hover sensor and determination of the direction uses information from the at least one hover sensor.

15. The apparatus of claim **1**, wherein:

determination of the direction of the at least one object relative to the apparatus further comprises determination, using information from a touch sensor, one or more attributes of a touch by the at least one object on the apparatus;

the one or more processors are further configured to cause the apparatus to perform at least the following: comparison of the one or more attributes of the touch and the one or more attributes of the acoustic signal with attributes of touch and attributes of acoustic signals in a database in order to determine a match; and

causation of an operation to be performed further comprises causation of the operation to be performed based on the determined match.

16. The apparatus of claim **15**, wherein:

determination, using information from a touch sensor, of one or more attributes of a touch by the at least one object on the apparatus is performed responsive to a determination a touch event has been detected, and determination of the one or more attributes for a touch is performed using information from the touch sensor at a touch detection time; and

comparison of the one or more attributes of the touch and the one or more attributes of the acoustic signal further comprises comparison of the one or more attributes of the touch at the touch detection time and audio attributes determined by processing microphone signal information delayed from the touch detection time by a time difference with attributes of touch and attributes of acoustic signals in the database in order to determine the match.

17. The apparatus of claim **16**, wherein the one or more processors are further configured to cause the apparatus to perform at least the following:

calculation of the time difference based on a difference between a location on the apparatus of the touch and a microphone used to recognize the one or more attributes of the acoustic signal;

performance of the recognition of the one or more attributes of the acoustic signal using a microphone signal captured using time windows starting at a point based at least in part on the time difference and progression from this point; and

performance of the comparison of the one or more attributes of the touch at the touch detection time and the one or more attributed determined with each window with pairs of touch and audio attributes in the database.

18. The apparatus of claim **16**, wherein:

determination of the one or more attributes for a touch occurs using the information from the touch sensor at the touch detection time and for information from the touch sensor at a plurality of delays from the touch detection time to at least delays from the touch detection time to the touch detection time plus the time difference.

19. The apparatus of claim **15**, wherein:

determination, using information from a touch sensor, of one or more attributes of a touch by the at least one object on the apparatus is performed responsive to a determination an audio event has been detected;

the one or more processors are further configured to cause the apparatus to perform at least the following:

determination, in response to detecting the audio event, of an audio detection time;

comparison of the one or more attributes of the touch and the one or more attributes of the acoustic signal further comprises comparison of attributes of touch determined at a plurality of delays delayed from the audio detection time into past times and attributes of the acoustic signal with attributes of touch and attributes of acoustic signals in the database in order to determine the match.

20. The apparatus of claim **15**, wherein:

the one or more processors are further configured to cause the apparatus to perform at least the following:

determination, in response to a touch event being detected, of a touch detection time;

determination, in response to an audio event being detected, of an audio detection time,

wherein only one of a touch event or an audio event is detected and either a touch detection time or an audio detection time is determined; and

causation of the operation to be performed by the apparatus is based on the determined match and based on either the determined touch detection time or the determined audio detection time.

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