

U.S. Patent No. 8,588,033	
Claim 11: The wristwatch of claim 1, arranged for performing said synchronization periodically in an automatic manner.	Element 1[D]: a microcontroller being arranged for reproducing on said electronic display the simulation of a mechanical watch movement comprising a gear train, said simulation being visible so as to indicate the time, said microcontroller being further arranged for synchronizing the displayed time by said displayed mechanical movement with that of said quartz oscillator.
Element 2[pre]: The wristwatch of claim 1, wherein	Element 1[pre]: Wristwatch comprising
Element 2[A]: said electronic display is associated with a touch sensor	Element 1[B]: an electronic display in said watchcase;
Element 3[pre]: The wristwatch of claim 2, wherein	Element 1[pre]: Wristwatch comprising Element 2[pre]: The wristwatch of claim 1, wherein
Element 3[A]: wherein said microcontroller is arranged for displaying the simulation of a movement and	Element 1[D]: a microcontroller being arranged for reproducing on said electronic display the simulation of a mechanical watch movement comprising a gear train, said simulation being visible so as to indicate the time, said microcontroller being further arranged for synchronizing the displayed time by said displayed mechanical movement with that of said quartz oscillator.
Element 3[B]: wherein the angular position of at least one element of said gear-train can be modified by pressing on said touch sensor.	Element 2[B]: and the position of at least one component of said movement can be modified by pressing on the position of said electronic display corresponding to said component.
17[pre]: Method for displaying time in a wristwatch , comprising displaying on an electronic display of a simulated mechanical watch movement comprising a gear train and of time indicators so as to simulate a mechanical watch,	Element 1[pre]: Wristwatch comprising Element 1[B]: an electronic display in said watchcase; Element 1[D]: a microcontroller being arranged for reproducing on said electronic display the simulation of a mechanical watch movement comprising a gear train, said simulation being visible so as to indicate the time , said microcontroller being further arranged for synchronizing the displayed time by said displayed mechanical movement with that of said quartz oscillator.

Element 17[A]: said method comprising a step of modifying a position of at least one component of said mechanical movement by detecting displacement of a finger on that component with a touch sensor connected to said display.	Element 2[B]: and the position of at least one component of said movement can be modified by pressing on the position of said electronic display corresponding to said component.
Element 15[pre]: The wristwatch of claim 1, wherein	Element 1[pre]: Wristwatch comprising
Element 15[C]: wherein at least two of said screens correspond to two distinct mechanical movements that can be selected by the user.	Claim 14: The wristwatch of claim 1, said microcontroller being arranged for enabling different mechanical movements selectable by the user for display.
Element 16[pre]: Wristwatch comprising:	Element 1[pre]: Wristwatch comprising
Element 16[A]: a watchcase;	Element 1[A]: a watchcase;
Element 16[B]: an electronic display in said watchcase;	Element 1[B]: an electronic display in said watchcase;
Element 16[C]: a touch sensor associated with said display and enabling the displacement of at least one finger along at least two different directions to be detected	Element 15[A]: said display being a display associated with a touch sensor enabling the displacements of at least one finger along at least two different directions to be detected, with the microcontroller being specifically arranged for interpreting signals from the touch sensor, for selecting one screen from among several available screens depending on these signals, and for displaying this screen on the entirety of said display,
Element 16[D]: a quartz oscillator,	Element 1[C]: a quartz oscillator,
Element 16[E]: a microcontroller being arranged for reproducing on said electronic display a simulation of a mechanical watch movement comprising a gear train visible so as to indicate the time and for synchronizing the displayed time by said displayed mechanical movement with that of said quartz oscillator,	Element 1[D]: a microcontroller being arranged for reproducing on said electronic display the simulation of a mechanical watch movement comprising a gear train, said simulation being visible so as to indicate the time, said microcontroller being further arranged for synchronizing the displayed time by said displayed mechanical movement with that of said quartz oscillator.
Element 16[F]: said microcontroller being further arranged for interpreting signals from the touch sensor, for selecting one screen from among several available screens depending on these signals, and for displaying this screen on the entirety of said display,	Element 15[A]: said display being a display associated with a touch sensor enabling the displacements of at least one finger along at least two different directions to be detected, with the microcontroller being specifically arranged for interpreting signals from the touch sensor, for selecting one screen from among several available screens depending on these signals, and for displaying this screen on the entirety of said display,

Element 16[G]: said microcontroller being further specifically arranged so as to cause screens to scroll by in order to replace durably the screen displayed initially by another screen, with the orientation and the direction of scrolling depending on the orientation and direction of said displacement,	Element 15[B]: said microcontroller being further specifically arranged so as to cause screens to scroll by in order to replace durably the screen displayed initially by another screen, with the orientation and the direction of scrolling depending on the orientation and direction of said displacement,
Element 16[H]: wherein at least two of said screens correspond to two distinct mechanical movements that can be selected by the user.	Element 15[C]: wherein at least two of said screens correspond to two distinct mechanical movements that can be selected by the user.
Element 18[A]: the angular position of at least one element of the gear train displayed on said display is modified by pressing on said element,	Element 2[B]: and the position of at least one component of said movement can be modified by pressing on the position of said electronic display corresponding to said component. Element 3[B]: wherein the angular position of at least one element of said gear-train can be modified by pressing on said touch sensor.
Element 18[B]: a crown stem is displayed on said display opposite a crown on the outside of a case of the watch, the displayed position of said crown stem being modified when an actuation of said crown is detected, so as to simulate a direct action by said crown on said displayed crown stem;	Claim 4: The wristwatch of claim 1, comprising a crown outside said watchcase; a crown stem being displayed on said display opposite said crown, the position of said displayed crown stem being modified by said microcontroller when said microcontroller detects that said crown has been actuated, so as to simulate a direct action by said crown on said displayed crown stem.
Element 18[C]: an element is displayed on said display opposite a push-button on the outside of the watchcase, the position of said element being modifiable by said microcontroller when said microcontroller detects that said push-button has been actuated, so as to simulate a direct action by said push-button on said displayed element;	Claim 5: The wristwatch of claim 1, comprising a push-button outside said watchcase; an element displayed on said display opposite said push-button, the position of said element being modifiable by said microcontroller when said microcontroller detects that said push-button has been actuated, so as to simulate a direct action by said push-button on said displayed element.
Element 18[D]: the position of at least one element of said movement is modified according to the data from an accelerometer;	Claim 6: The wristwatch of claim 1, further comprising an accelerometer, said microcontroller being arranged for modifying the position of at least one of said elements of said movement according to the data from said accelerometer.

Element 18[E]: the position of an oscillating mass displayed on the display depends on an output signal from said accelerometer;	Claim 7: The wristwatch of claim 6, wherein said displayed mechanical movement is an automatic movement with an oscillating mass, the position of said displayed oscillating mass depending on an output signal from said accelerometer.
Element 18[F]: the position of a balance and/or tourbillon displayed on said display depends on an output signal from said accelerometer;	Claim 8: The wristwatch of claim 6, wherein said displayed mechanical movement comprises a regulating organ with a balance and/or a tourbillon displayed on said display, the position of said displayed balance and/or tourbillon depending on an output signal from said accelerometer.
Element 18[G]: the oscillations of a regulating organ displayed on said display are simulated taking into account the simulated mass of a simulated balance and the rigidity of a returning element displayed on said display, with the time displayed being dependent on said simulation;	Claim 9: The wristwatch of claim 1, wherein said displayed mechanical movement comprises a regulating organ with a balance, a returning element and an escapement, the microcontroller being arranged for calculating and displaying a simulation of the oscillations of said displayed regulating organ taking into account the mass of said balance and the rigidity of said returning element, wherein the displayed time depends on said simulation.
Element 18[H]: the running of said displayed regulating element is modified according to the accelerations to which the watch is subjected;	Claim 10: The wristwatch of claim 9, comprising means for modifying the running of said displayed regulating organ according to the accelerations to which the watch is subjected.
Element 18[I]: the running of a quartz oscillator is synchronized periodically or upon request from the user with the time displayed by said mechanical movement;	Claim 11: The wristwatch of claim 1, arranged for performing said synchronization periodically in an automatic manner. Claim 12: The wristwatch of claim 11, comprising means for entering and executing a request for said synchronization by the user.
Element 18[J]: said displayed mechanical movement is displayed on the entire surface of the electronic display so as to occupy the position and the dimensions of a real mechanical movement;	Claim 13: The wristwatch of claim 1, arranged for displaying said mechanical movement on the whole surface of the electronic display so as to occupy the position and the dimensions of a real mechanical movement.

Element 18[K]: the user selects the mechanical movement displayed on said display from among several available mechanical movements to be chosen from.	Claim 14: The wristwatch of claim 1, said microcontroller being arranged for enabling different mechanical movements selectable by the user for display.
--	--