

U.S. Patent No. 9,651,922

Element 9[pre]: A method for replacing an initially displayed card displayed by a wristwatch by a replacement card	Element 1[pre]: A wristwatch having: Element 1[C]: a processing circuit specifically laid out so as to interpret the signals from the touch-sensitive glass, for selecting a card from several available cards depending on these signals and for displaying said card on the entire digital matrix display; Element 1[E]: wherein said processing circuit is specifically laid out so as to cause said several available cards to scroll past in order to lastingly replace the initially displayed card with a replacement card selected between said several available cards, wherein each card of said several available cards has a distinct fixed or periodically refreshed image,
Element 9[A]: detecting a direction of a movement of at least one finger at any place and along at least two different directions on a two-dimensional touch-sensitive glass	Element 1[B]: a sheet of touch-sensitive glass; Element 1[D]: wherein said touch-sensitive glass is a two-dimensional glass for detecting a movement of at least one finger at any place on the touch-sensitive glass along at least two different directions;
Element 9[B][1]: scrolling on a digital matrix display of several available cards so as for said scrolling to stop of itself so as to align an edge of the replacement card with an edge of the matrix display	Element 1[E]: wherein said processing circuit is specifically laid out so as to cause said several available cards to scroll past in order to lastingly replace the initially displayed card with a replacement card selected between said several available cards, wherein each card of said several available cards has a distinct fixed or periodically refreshed image,
Element 9[B][2]: wherein one card of said several available cards and occupying the entire digital matrix display is replaced after the scrolling, immediately and without further user intervention, by a different card selected between said several available cards and occupying the entire digital matrix display;	Element 1[F]: wherein the size of the image corresponds to the size of said digital matrix display so that the displayed card occupies the whole of said digital matrix display; Element 1[G]: wherein one card of said several available cards and occupying the entire digital matrix display is immediately and without further user intervention replaced after the scrolling

	by a different card of said several available cards that occupies the entire digital matrix display;
Element 9[B][3]: and wherein the scrolling direction depends only on the direction of said movement so that said replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display	Element 1[H]: wherein said processing circuit is further laid out so that the replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display.
Element 9[C][1]: lastingly displaying the replacement card on the whole of said digital matrix display, wherein each card of said several available cards has a distinct fixed or periodically refreshed image,	Element 1[C]: a processing circuit specifically laid out so as to interpret the signals from the touch-sensitive glass, for selecting a card from several available cards depending on these signals and for displaying said card on the entire digital matrix display Element 1[E]: wherein said processing circuit is specifically laid out so as to cause said several available cards to scroll past in order to lastingly replace the initially displayed card with a replacement card selected between said several available cards, wherein each card of said several available cards has a distinct fixed or periodically refreshed image, Element 1[F]: wherein the size of the image corresponds to the size of said digital matrix display so that the displayed card occupies the whole of said digital matrix display;
Element 9[C][2]: the size of the images corresponding to the size of said digital matrix display.	Element 1[F]: wherein the size of the image corresponds to the size of said digital matrix display so that the displayed card occupies the whole of said digital matrix display;
Claim 11: The method of claim 9, further comprising the detecting of simultaneous contacts on several points of the two-dimensional touch-sensitive glass.	Claim 6: The wristwatch of claim 1, wherein the processing circuit being laid out for detecting simultaneous contacts on several points of the touch-sensitive glass so as to constitute a multi-touch haptic screen.

Claim 12: The method of claim 9, further comprising the determining of the displacement of the center of gravity of the contact zone of the finger on the two-dimensional touch-sensitive glass.	Claim 7: The wristwatch of claim 1, wherein the processing circuit being laid out for determining the displacement of the center of gravity of the contact zone of the finger on the touch-sensitive glass.
Claim 13: The method of claim 9, wherein the different cards scroll in continuous fashion on the digital matrix display, the scrolling being interrupted so as to align the edge of a card with the edge of the digital matrix display.	Element 1[E]: wherein said processing circuit is specifically laid out so as to cause said several available cards to scroll past in order to lastingly replace the initially displayed card with a replacement card selected between said several available cards, wherein each card of said several available cards has a distinct fixed or periodically refreshed image, Element 9[B][1]: scrolling on a digital matrix display of several available cards so as for said scrolling to stop of itself so as to align an edge of the replacement card with an edge of the matrix display
Claim 16: The method of claim 15, wherein the card scrolling speed is variable, the scrolling being slowed down each time a card is switched to another one.	Claim 15: The method of claim 14, wherein the card scrolling speed is variable, the scrolling being slowed down before stopping completely.
Claim 17: The method of claim 13, wherein the card scrolling is interrupted by a brief pressure on the two-dimensional touch-sensitive, so as to cause the card best centered on the display at the time of the interruption to be selected and displayed.	Claim 10: The method of claim 9, further including the entering of a touch command for confirming or stopping the scrolling.
Claim 19: The method of claim 9, wherein said cards are arranged in a plurality of levels, wherein the method comprises a step of vertical or horizontal scrolling and a step of entering a particular command for switching from one level to another.	Claim 4: The wristwatch of claim 2, wherein said cards are arranged in a plurality of levels, wherein the choice of a card within each level is made either by scrolling vertically or by scrolling horizontally, wherein a particular command makes it possible to switch from one level to another.
Claim 21: The method of claim 9, wherein said several available cards are organized in a virtual closed loop row or in a virtual closed loop column.	Claim 8: The wristwatch of claim 1, wherein said several available cards are organized in a virtual closed loop row or in a virtual closed loop column.

Claim 22: The method of claim 9, wherein said several available cards are organized in a virtual closed loop row and in a virtual closed loop column.	Claim 8: The wristwatch of claim 1, wherein said several available cards are organized in a virtual closed loop row or in a virtual closed loop column.
Element 23[pre]: A wristwatch having:	Element 1[pre]: A wristwatch having:
Element 23[A]: a digital matrix display;	Element 1[A]: a digital matrix display;
Element 23[B]: a sheet of touch-sensitive glass;	Element 1[B]: a sheet of touch-sensitive glass;
Element 23[C]: a processing circuit specifically laid out so as to interpret the signals from the touch-sensitive glass, for selecting a card from several available cards depending on these signals and for displaying said card on the entire digital matrix display, wherein each card has a distinct fixed or periodically refreshed image;	Element 1[C]: a processing circuit specifically laid out so as to interpret the signals from the touch-sensitive glass, for selecting a card from several available cards depending on these signals and for displaying said card on the entire digital matrix display; Element 1[E]: wherein said processing circuit is specifically laid out so as to cause said several available cards to scroll past in order to lastingly replace the initially displayed card with a replacement card selected between said several available cards, wherein each card of said several available cards has a distinct fixed or periodically refreshed image,
Element 23[D]: wherein said touch-sensitive glass is a two-dimensional glass for detecting a movement of at least one finger at any place on the touch-sensitive glass along at least two different directions;	Element 1[D]: wherein said touch-sensitive glass is a two-dimensional glass for detecting a movement of at least one finger at any place on the touch-sensitive glass along at least two different directions;
Element 23[E]: wherein said processing circuit is specifically laid out so as to cause said several available cards to scroll past by displaying the image of said cards one at a on the digital matrix display in order to lastingly replace the initially displayed card with a replacement card selected within said several available cards, immediately after the scrolling and without further user intervention;	Element 1[E]: wherein said processing circuit is specifically laid out so as to cause said several available cards to scroll past in order to lastingly replace the initially displayed card with a replacement card selected between said several available cards, wherein each card of said several available cards has a distinct fixed or periodically refreshed image, Element 1[G]: wherein one card of said several available cards and occupying the entire digital matrix display is immediately and without further user intervention replaced after the scrolling by a different card of said several available cards that occupies the entire digital matrix display;

Element 23[F]: wherein the size of the image corresponds to the size of said digital matrix display so that the displayed card occupies the whole of said digital matrix display;	Element 1[F]: wherein the size of the image corresponds to the size of said digital matrix display so that the displayed card occupies the whole of said digital matrix display;
Element 23[G]: wherein said processing circuit is further laid out so that the replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display.	Element 1[H]: wherein said processing circuit is further laid out so that the replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display.
Element 24[pre]: A wristwatch having:	Element 1[pre]: A wristwatch having:
Element 24[A]: a digital matrix display;	Element 1[A]: a digital matrix display;
Element 24[B]: a sheet of touch-sensitive glass;	Element 1[B]: a sheet of touch-sensitive glass;
Element 24[C]: a processing circuit specifically laid out so as to interpret the signals from the touch-sensitive glass, for selecting a card from several available cards depending on these signals and for displaying said card on the entire digital matrix display;	Element 1[C]: a processing circuit specifically laid out so as to interpret the signals from the touch-sensitive glass, for selecting a card from several available cards depending on these signals and for displaying said card on the entire digital matrix display;
Element 24[D]: wherein said touch-sensitive glass is a two-dimensional glass for detecting a movement of at least one finger at any place on the touch-sensitive glass along at least two different directions;	Element 1[D]: wherein said touch-sensitive glass is a two-dimensional glass for detecting a movement of at least one finger at any place on the touch-sensitive glass along at least two different directions;
Element 24[E]: wherein said processing circuit is specifically laid out so as to cause cards to scroll past in order to lastingly replace the initially displayed card with a replacement card, wherein each card has a fixed or periodically refreshed image,	Element 1[E]: wherein said processing circuit is specifically laid out so as to cause said several available cards to scroll past in order to lastingly replace the initially displayed card with a replacement card selected between said several available cards, wherein each card of said several available cards has a distinct fixed or periodically refreshed image,
Element 24[F]: wherein the size of the image corresponds to the size of said digital matrix display so that the displayed card occupies the whole of said digital matrix display	Element 1[F]: wherein the size of the image corresponds to the size of said digital matrix display so that the displayed card occupies the whole of said digital matrix display;
Element 24[G]: wherein said processing circuit is further laid out so that the replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display; and	Element 1[H]: wherein said processing circuit is further laid out so that the replacement card is dependent from the initially displayed card and from the direction of said movement and is independent from the starting point and end point of said movement on said digital matrix display.

Element 24[H]: wherein said several available cards are organized in a virtual closed loop row and in a virtual closed loop column.	Claim 8: The wristwatch of claim 1, wherein said several available cards are organized in a virtual closed loop row or in a virtual closed loop column. Claim 22: The method of claim 9, wherein said several available cards are organized in a virtual closed loop row and in a virtual closed loop column.
Claim 20: The method of claim 9, wherein a plurality of said cards displays a simulation of a virtual mechanical movement.	Claim 5: The wristwatch of claim 4, wherein at least one of said cards makes it possible to calculate and display a simulation of a mechanical watch displaying the time, so as to enable the user to change the mechanical watch displayed by scrolling cards.