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Medibotics: Wrist-Worn Devices with Expandable Displays and/or Cameras: 5/2/2025

Medibotics has worked for over ten years on creating innovative designs for wrist-worn devices, including tackling the problems of: (1) how to configure a display with an expandable size for a wrist-worn device; and (2) where to place a camera on a wrist-worn device to enable a person to take outward-facing pictures without having to contort their arm.

Some companies have proposed large-screen devices which look like someone just strapped a cell phone on a person's arm. They tend to be unattractive and not fit the curves of the arm. Other companies are working on developing curved display screens to span the entire wrist circumference. However, even if such circumferential curved screens prove feasible, they will still require a person to rotate their wrist in order to access a large portion of the screen. There remains a need for wrist-worn devices with innovative screen configurations, including expandable screens, which enable larger-scale human-computer interaction on the wrist. Medibotics addresses this need with expandable and/or rotating multi-section displays.

Some companies have proposed incorporating a camera into the main display or the rim of a smart watch housing, but neither location enables a person to take outward-facing pictures without having to contort their arm and/or look away from the subject they are imaging. Medibotics addresses this problems with cameras at other locations on the circumference of the device strap and/or pop-up camera configurations.

Medibotics' IP portfolio for wrist-worn wearable devices with expandable displays and integrated cameras have been cited in patent applications by: Apple, Boe Technology, Canon, Fujitsu, Google, Honeywell, Huijia Health Life Technology, IBM, Immersion Corporation, Intel, Iritech, Lenovo, LG, Meta/Facebook, Microsoft, Motorola, Qualcomm, Samsung, and Sony. Medibotics related IP includes:

♦ 2024-09-17 ~ 18888099 ~ 20250013261 ~ Wrist-Worn Device with a Plurality of Displays Having a First Non-Coplanar Configuration and a Second Coplanar Configuration

♦ 2023-07-25 ~ 18226213 ~ 20230384825 ~ Wrist-Worn Device with a Variable-Size Display Which is Expanded by Unrolling or Sliding

♦ 2022-07-24 ~ 17871952 ~ 20220357707 ~ 11747769 ~ Smart Watch with Variable-Configuration Display

♦ 2021-10-31 ~ 17515509 ~ 20220050425 ~ Wrist-Worn Device with a Flip-Up or Pop-Up Component and One or More Cameras

♦ 2020-07-12 ~ 16926748 ~ 20200348627 ~ Wrist-Worn Device with One or More Cameras and a Comfortable Arm Posture During Imaging

♦ 2020-03-15 ~ 16819147 ~ 20200218312 ~ 11429151 ~ Wearable Devices for the Wrist and/or Arm with Multiple and Multi-Configuration Displays

♦ 2019-08-04 ~ 62882560 ~ Wrist-Worn Computing Device with Multi-Configuration Display

♦ 2019-07-19 ~ 62876213 ~ Incorporating One or More Cameras into a Wrist-Worn Device

♦ 2019-03-19 ~ 62820337 ~ Wrist-Worn Devices with Two or More Displays

♦ 2018-01-29 ~ 15882255 ~ 20180150101 ~ 10466741 ~ Dual-Display Smart Watch with Proximal and Distal (Analog and Electronic) Displays

♦ 2017-09-01 ~ 62553618 ~ Smart Watch with Dual Displays

♦ 2016-07-17 ~ 15212235 ~ 20160349790 ~ 10429888 ~ Wearable Computer Display Devices for the Forearm, Wrist, and/or Hand

♦ 2016-06-24 ~ 62354385 ~ Computer Display for the Arm that is Visible Whether or Not One is Wearing Clothing with a Long Sleeve

♦ 2016-06-17 ~ 62351447 ~ Return of the Wearable Device for the Arm with Dual Arcuate Displays

♦ 2016-04-01 ~ 62316798 ~ CuffThink (TM) Computer Display that is Removably-Attached to a Garment Cuff or Sleeve

♦ 2016-01-07 ~ 62275876 ~ CuffThink (TM) Computer Display that is Removably-Attached to a Garment Cuff or Sleeve

♦ 2015-08-07 ~ 62202385 ~ Wearable Device for the Arm with Dual Arcuate Displays

♦ 2015-02-16 ~ 14623337 ~ 20150309535 ~ 9582035 ~ Wearable Computing Devices and Methods for the Wrist and/or Forearm

♦ 2015-02-13 ~ 62115691 ~ Adjustment of Wearable Computer-to-Human Interface Based on Environmental and/or Physiological Sensors

♦ 2015-02-07 ~ 62113423 ~ Sensor-Informed Modification of the Interface Modality Between a Human and a Wearable Computing Device

♦ 2015-02-03 ~ 62111163 ~ Forearm-Wearable Computing Device with Large Display Area

♦ 2015-01-23 ~ 62106856 ~ Forearm Wearable Computing Device with Proximal and Distal Arcuate Bands

♦ 2015-01-06 ~ 62100217 ~ Forearm Wearable Device with Distal-to-Proximal Flexibly-Connected Display Modules

♦ 2014-03-05 ~ 61948124 ~ Wearable Computing Device for the Wrist and/or Arm

♦ 2014-02-25 ~ 61944090 ~ Wearable Computing Device for the Wrist and/or Arm