

Phone Case with Screen Wiper
Team 9

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BACKGROUND OF THE INVENTION

Field of the Invention

[0001] The invention relates in general to a mobile telephone case and more specifically to a phone case including a wiper to clean the mobile phone screen.

Description of Related Art Including Information Disclosed Under 37 CFR 1.97 and 37 CFR 1.98

[0002] Many mobile phone users choose to protect their devices from drops and cracks with phone cases. It is also important for the user to be able to clean unwanted dirt, debris and smudges from their phone screens. There are several designs that allow the user to protect their mobile phones, and a few that allow the user to simultaneously clean their mobile phone screen.

[0003] US Patent D827,629 S issued Sept. 4, 2018, by Liangliang Yu for an ornamental design for a mobile phone case.

[0004] US Patent Publication US20150045096A1 published Feb. 12, 2015, by Johnson for MOBILE TELEPHONE CASE WITH CLEANER discloses a mobile telephone case with an open face top cover has a substantially flat back platform with raised sides along three of four edges and is dimensioned to receive a mobile device. A bottom cover includes a further back platform with further raised sides along three of four edges and that is rotatably affixed to the fourth edge of the open face cover via a connecting member such that the raised sides interconnect with the further raised sides. A microfiber cloth is affixed to a continuous back surface formed by the back platform and the further back platform.

[0005] US Patent 10,052,665 issued Aug. 21, 2018, by Scott Martin Bushaw, et al for DEVICES AND METHODS FOR DISPENSING FLUIDS AND WIPING SURFACES discloses devices and methods for dispensing fluids and wiping surfaces. A cleaning device comprises a housing comprising an outer housing portion and an inner housing portion, the outer housing portion configured to be grasped and manipulated by a user; a dispenser comprising a porous or fluid permeable material, the dispenser positioned at least partially within a dispenser cavity of the inner housing portion; and a wiper comprising a wiping surface, wherein at least a portion of the wiper is positioned within a wiper cavity of the outer housing portion.

[0006] US Patent 10,059,310 issued Aug. 28, 2018, by Gaucher et al. for STREAMLINED FLAT WINDSCREEN WIPER discloses a streamlined flat windscreen wiper for a vehicle. The flat wiper includes a longitudinal wiper blade, at least one longitudinal stiffening member, a longitudinal member for retaining the wiper blade and the stiffening member, a longitudinal streamlined portion having two terminal caps and a central mounting extending between the terminal caps and being connected thereto. The mounting includes means for fixing to the stiffening member or to the member for retaining the stiffening member, and each cap comprising means for guiding in translation terminal parts of the member.

[0007] The typical devices used to protect or clean a mobile phone are focused on one task and have disadvantages. Some of these mobile phone cases are cumbersome and difficult to effectively clean therefore leaving the user with a protected yet dirty or damaged mobile phone. Other mobile phone devices are focused primarily

on keeping the user's mobile phone clean and do not provide any protection from damage. These devices are effective in their own tasks, yet fall short in providing dual purposes for the user.

[0008] While other said devices provide usefulness to a user, there is yet to be a device which completes both tasks. The mobile phone case of the present invention includes both a protective outer case surrounding the user's phone as well as a moveable screen wiper. The inclusion of both the outer case and the moveable screen wiper allows for the mobile phone case of the present invention to protect the user's mobile phone scratches, cracks, and other damage to the phone while also offering an effective and easy way to clean away dirt, debris, and smudges from the face of the mobile phone screen. Also, the combination of these two items will increase the functionality and convenience of the user's mobile phone leaving the user with a more efficient and useful device.

BRIEF SUMMARY OF THE INVENTION

[0009] A mobile phone case of the present invention comprises a flat platform with raised side panels and an open face as to encase a mobile phone; further comprising a top and bottom cover with connecting member as for the separation of the top and bottom covers.

[0010] Additionally, the mobile phone case further comprises a rubber longitudinal wiper blade affixed the topmost section of the case; wherein the wiper is attached with a mechanism allowing said wiper blade to be moved along the phone screen by the user and then re-positioned back to the top of the case.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S)

[0011] **FIG. 1** is a perspective view of the phone case with no phone encased.

[0012] **FIG. 2** is a front view of a phone encased with the present invention.

[0013] **FIG. 3** is a left side view of a phone encased with the present invention.

List of Reference Numerals

[0014] **2** top portion of the protective part of phone case

[0015] **4** bottom portion of the protective part of the phone case

[0016] **6** screen wiper

[0017] **8** connection between the top and bottom portions of the case

[0018] **10** wiper receptacle

[0019] **12** mobile phone

DETAILED DESCRIPTION OF THE INVENTION

[0020] The invention relates to mobile telephone cases and more specifically to a protective mobile phone case that self cleans the phone's screen with a cleaning wiper blade similar to that of a car windshield wiper blade. With reference to **FIGS. 1** and **2** the case consists of a flat back platform, with raised side panels on four edges and an open face to fit a mobile device. Specifically, the length and width of the back platform can be based on the type of mobile phone to be encased. Examples of different mobile phones include mobile devices manufactured by Apple Inc., Samsung, Nokia, Sony, as well as any other popular phone manufacturers as to be determined.

[0021] The protective covering of the case can be made from materials including polyurethane, polycarbonate, plastic, or rubber. Other materials for protective covering are possible. The phone case with screen wiper includes back panels and side panels that are made from durable material as to also protect the mobile phone from drops.

[0022] A horizontal cleaning wiper blade as seen in **FIGS. 1 and 2** is affixed to the top most section **2** of the case. Said wiper **6** is movable from the top of the phone case **2**, to the bottom of the phone case **4** along the mobile phone screen **12**. The wiper **6** has a small prong affixed the blade that is raised for the user to access and move the blade. The purpose of the blade **6** is to move it vertically along the screen to clean any dirt, debris or smudges from the surface of the mobile device **12** screen. To access the cleaning wiper **6**, a user may grip hold of the prong attached to the wiper blade and pull it vertically to the bottom of the screen and remove dirt and debris from the phone screen.

[0023] Although the present invention has been described with reference to specific embodiments, it is understood that modifications and variations of the present invention are possible without departing from the scope of the invention, which is defined by the claims set forth below. Unless defined otherwise, all technical and scientific terms used herein have the same meaning as commonly understood by one of ordinary skill in the art to which this invention belongs. Any methods and materials similar or equivalent to those described herein can also be used in the practice or testing of the present invention; however, the preferred methods and materials are now described.

CLAIMS

The invention claimed is:

1. A mobile phone case with screen wiper comprising;
 - a. A flat back platform with raised side panels on four edges with an open face as to encase a mobile phone; and
 - b. A strong casing made from durable, drop resistant material; and
 - c. A slidable wiper blade and an attaching mechanism allowing the wiper blade to be pull along a mobile phone screen and returned to the original position.
2. The mobile phone case as claimed in claim 1 further comprising a top and a bottom cover with a connecting member for the movement of the bottom cover away from the top cover.
3. The mobile phone case as claimed in claim 2 wherein the top and bottom covers may be made from polyurethane, polycarbonate, plastic, rubber, or any other strong material.
4. The mobile phone case of claim 3 further comprising a longitudinal wiper blade.
5. The mobile phone case of claim 4 wherein said wiper blade is made of rubber.

ABSTRACT OF THE DISCLOSURE

The mobile phone case with a screen wiper of the present invention allows for the convenience of having a simple and efficient way to a protective phone case as well as a clean screen at all times. The mobile phone case comprises a flat platform with raised side panels and an open face as to encase a mobile phone with a top and bottom cover, connecting member and a movable screen wiper. When the user applies this invention to their mobile device, the user will have the ability to remove any dirt, debris, or smudges from the surface of the mobile device and have protection for the overall device.