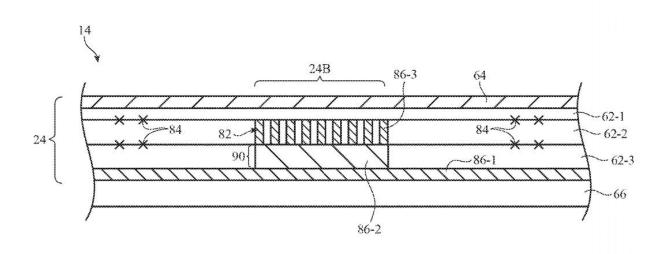


## Apple applies for a patent on self-healing phone display technology

October 5 2020, by Bob Yirka



Credit: United States Patent Application, 20200313111

Apple Inc. has applied for a patent on a bendable phone that also has self-healing display technology. The company applied for the patent last year and it has just recently been made public.



Bendability technology in smartphones is still in its infancy. Those phones that are available have been found to be susceptible to more screen scratches than regular phones. This is due to dirt or other material that gets on the screen which becomes a scratching problem when the phone is bent and especially when folded. Because of that, the major smartphone makers, including Apple, have been looking for a way to make them less easily scratched. One possible solution is to place a layer of material on the screen face that has <u>self-healing</u> capabilities. In this new <u>patent application</u>, Apple has made it clear that the company is looking into the possibility of making and selling a new bendable or foldable phone—the name of the technology it is looking to patent is called "Electronic Devices With Flexible Display Cover Layers."

In the patent application, Apple refers to not just bendable phone technology, but foldable technology—similar perhaps, to the Galaxy Fold smartphone by Samsung. In their filing, they refer to it as bending vertically, like a book. Mention is also made of an elastomer layer (elastomers are elastic materials that return to their original shape after being bent—generally due to application of heat) covering the screen, making it self-healing. Elastomer layering typically requires an external force coming into play to set off a self-healing event. Generally, as is noted in the patent filing, this comes in the form of heat, electricity or light. Apple does not specify which it had in mind for its foldable phone. There is also no mention in the patent application of when self-healing might occur, whether on demand, at night when charging, or during maintenance efforts. Apple also lists eight people on the patent application as the inventors of the technology they are seeking to patent.

Notably Apple, and other companies, routinely file <u>patent</u> applications for technology that never comes to fruition, thus it is not clear how serious Apple is about developing the technology described in the application.



## **More information:** Electronic Devices With Flexible Display Cover Layers, <u>United States Patent Application</u>, 20200313111

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