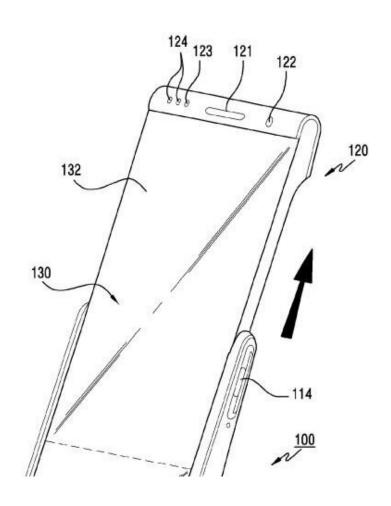


Samsung patent talk reveals smartphone designs on rollable

June 14 2019, by Nancy Cohen



Samsung watchers are buzzing around over a discovered patent filing with the World Intellectual Property Office. Topic in hand: a design for



some kind of rollable device.

Never mind that the Galaxy Fold was postponed; Samsung is not abandoning new ideas for smartphones. *Digital Trends* and other techwatching sites got busy reporting that rollable phones have been discussed in a patent filing.

(As Sam Rutherford said in *Gizmodo*, "if you thought Samsung's early troubles with the Galaxy Fold was going to scare it away from making more phones with foldable screens in the <u>future</u>, think again.")

This is from LetsGoDigital:

"In 28 November 2018, Samsung Electronics filed a patent with the WIPO (World Intellectual Property Office) for an 'Electronic device including <u>flexible display</u> with expandable display area'. The patent was published on 6 June 2019 and describes a smartphone with a flexible display that can be pulled out, creating an extra large screen surface."

ChannelNews said the Company released a concept for a smartphone that, scroll-like, would roll out vertically and increase screen size. David Richards looked at the designs that the patent offered and commented that "While the images show off a phone that appears fairly traditional at a first glance, a closer look reveals it's actually hiding a secret rollable display inside."

Andy Meek, *BGR*, offered an description of how the "rollable experience" works; at the core is a <u>slider</u> system for rolling out extra display, envisioned to increase the overall surface area by at least 60 percent.

Meek went on to say that this extendable display was stored in the housing "to prevent exterior scratches and damage, while the patent



envisions either a side button or a manual, semi-automatic and/or automatic release for the sliding system mechanism."

The phone's receiver with LED indicator, camera system with several lenses, would be in the upper bezel, such that the user would see the top of the device carrying "a selfie camera and earpiece which seems able to extend outward from the phone," said Richards.

Marc Jansen, *Digital Trends*: "Rather than unfolding into a larger, tablet-sized screen, the Galaxy Roll's screen would extend upwards on rollers, increasing the aspect ratio and creating a much longer screen. When not in use, the extra screen would be stored in the bottom of the device, and would presumably roll up."

Jordan Valinsky, *CNN Business*, referred to the patent's smartphone concept as a "stretchable" phone: "Some of the phone's display would roll underneath a bezel on the bottom. When stretched <u>vertically</u>, the screen would unfurl."

Shane McGlaun in *HotHardware* made note of the difference between this concept and the Fold in his explanation of what is going on:

"Rather than having a screen that folds in the middle as the Galaxy Fold did, the patent shows a device that has a screen that rolls up inside the body by wrapping around two internal rollers. The thicker bottom area of the smartphone has two rollers inside that the screen appears to wrap around once each. The user of the device can grasp the top section of the phone and extend it to make the screen taller."

When held in portrait mode, he said, the form factor was not all that appealing; users, however, would have "significantly more screen space" when expanded in landscape mode.



Tom's Guide called it "the weirdest phone yet" but that did not stop it from writing about it; indeed, it is a curiosity for a number of tech watchers. Jesus Diaz commented on the design as "something else. I just don't know what the purpose of extending a screen a 60% is."

Jansen commented that "It's hard to imagine what advantages would be offered by having a significantly longer screen." And, he made the comment once again in his article: "it's hard to imagine a yearning for longer screens. Besides which, we don't even know if consumers will react positively to folding smartphones, never mind rolling ones."

On an upbeat note, Scott Gordon, *Android Authority*, drew on the advantage of users having options in viewing.

It may offer the much the same benefit as the Galaxy Fold: a smart device with a small form factor that can be expanded for additional functionality. The Galaxy Roll, as we're calling the potential phone, could maintain a pocket-friendly size while retracted, while offering a better media viewing and multitasking experience when <u>extended</u>.

Whether one chooses to react with pro or con, patent filings are not always turning into actual products, and *Tom's Guide*'s Diaz performed the task of reminding readers as such. "While this <u>patent</u> won't necessarily be turned into a <u>phone</u> anytime soon, the technology can be used to make a better rollable format."

Jansen in *Digital Trends* reminded readers that "Samsung is a massive company with a correspondingly large research and development team, and it's likely sitting on a number of patented designs for new smartphones, from the plausible to the absurd."

More information: Patent application (PDF): nl.letsgodigital.org/uploads/2 ... msung-smartphone.pdf



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Citation: Samsung patent talk reveals smartphone designs on rollable (2019, June 14) retrieved 18 April 2024 from

https://techxplore.com/news/2019-06-samsung-patent-reveals-smartphone-rollable.html

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