Apple patents interchangeable AirPods design with biometric sensors

Apple’s AirPods may be best-in-class wireless earbuds, but they’re not for everyone. Due to the shape of some people’s inner ear, the headphones simply don’t fit every possible ear shape well, or in some cases, cause pain when placed firmly inside the ear. That’s a major drawback for a $160 pair of headphones, especially ones that could be easily lost and are definitely not cheap to replace.

But a new patent, filed originally last year and awarded to Apple today, highlights a possible solution: interchangeable, “universal” AirPods that could use built-in biometric sensors to perform health tracking and also to determine in which ear a specific bud is being placed.

New AirPods could collect biometric data and be more comfortable to wear

The approved patent application, spotted by *9to5Mac*, describes a symmetric earbud design that “can be worn interchangeably in either a left or a right ear of a user.” The patent goes on to say that “in such an embodiment, the earbud can include a sensor and circuitry configured to determine and alter operation of the earbud in accordance to which ear the earbud is determined to be sitting in.”

The patent describes at least one of the sensors as being biometric and “configured to be pressed up against a portion of the tragus,” so the AirPods could perform heart rate monitoring and take body temperature measurements, among other health-related metric tracking.

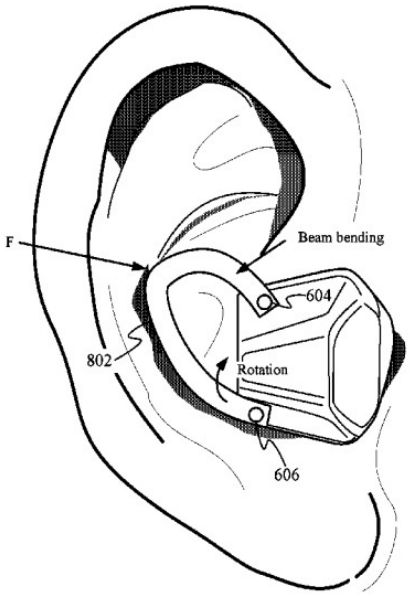


image: Apple

Of course, this being a patent, the actual technology could be years away from even a prototype phase, let alone a consumer product. But we do know Apple is hard at work on a next-generation version of the AirPods, which originally came out way back in December 2016 and haven't seen an update in two years, despite reportedly strong sales.

According to Apple analyst Ming-Chi Kuo, Apple is planning to release a new version of the AirPods with noise cancellation and waterproofing for early next year, with a complete redesign of the headphones coming in 2020. If Apple were to overhaul the design and make the buds interchangeable, it makes sense that such a product would still be about two years out.

There's also the matter of the unreleased AirPower wireless charging mat that the company has been silent about for more than a year now, which wouldn't work with the current AirPods case. So it's safe to say there is a new version of the AirPods coming imminently, but those hoping for a more comfortable design might need to wait a couple more years for the version *after* the next one.

https://www.theverge.com/2018/12/4/18126309/apple-airpods-patent-interchangeable-design-wireless-ear-buds-biometric-sensors