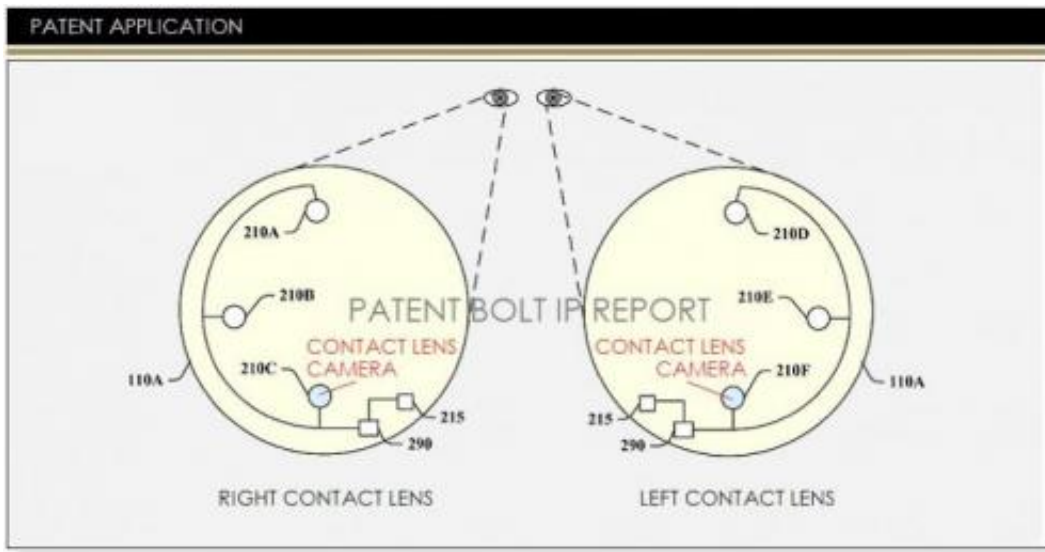


Patent talk: Google sharpens contact lens vision

April 16 2014, by Nancy Owano



Credit: patentbolt.com

(Phys.org) —A report from Patent Bolt brings us one step closer to what Google may have in mind in developing smart contact lenses. According to the discussion Google is interested in the concept of contact lenses with built-in cameras where images can be captured when the wearer blinks; the lenses could behave as a system that processes data to help the blind navigate daily hurdles such as safely crossing the street as well as serving up a number of information-display applications for those with normal vision. Google's patent application involves a micro camera and sensors on the surface.

Patent Bolt's [posting](#) on April 13 said "today's new patent revelations cover the integration of tiny cameras into their future smart contact lenses. The user will be able to control the camera through a sophisticated system using the owner's unique blinking patterns. The new camera system could have many benefits to users."

The image data can be processed to detect light, colors, pattern of colors, objects, faces, motion, or any information that can be derived from processing one or more images.

According to Patent Bolt, Google originally filed their [patent application](#) in Q4 2012 and the US Patent Office published this patent application recently. "Considering that this is a patent application," said Patent Bolt, "the timing of such a product to market is unknown at this time."

Google's development interests in smart contact lenses [were also made known back in January this year](#), when Google's official [blog](#) announced that Google was testing a smart contact lens built to measure glucose levels in tears. They hoped the effort "could someday lead to a new way for people with diabetes to manage their disease."

The work was a response to scientists investigating body fluids in their hopes to find an easier way to track [glucose levels](#). "At Google[x], we wondered if miniaturized electronics—think: chips and sensors so small they look like bits of glitter, and an antenna thinner than a human hair—might be a way to crack the mystery of tear glucose and measure it with greater accuracy."

They said the contact lens being tested was using a tiny wireless chip and miniaturized glucose sensor embedded between two layers of soft contact lens material.

Beyond an application to help diabetics, the phrase used, "miniaturized

electronics," points to Google's wide curiosity about the potentials of smart contact lenses, Babak Parviz had in another talk posed the question: What if we packed [contact lenses](#) with tiny devices? Possibilities include both health monitoring and information display.

In 2014, with a patent application such as this emerging, it is all the easier to recognize Google's interest in contact lens technologies, and to be reminded of that Google aura of a blinking lightbulb—that never stops blinking.

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