I. GOOGLE GLASS UPDATE; H.B. NO. 155

At the July 1, 2013 BIC meeting, I shared information about prototype computers affixed to eyeglasses - Google Glass. The SCPD had issued the attached June 17, 2013 comments endorsing the concept underlying H.B. No. 155 which would bar wearing such a device while driving.

Consistent with the attachments, Google Glasses are expected to be released for sale to the general public in 2014. VSP, the vision insurer for 64 million individuals (1 in 5 Americans) will cover some of the cost of the integrated computer/glasses. Samsung is also working on a similar product. Legislation is now pending in Delaware, Illinois, Missouri, New Jersey, New York and West Virginia to ban use of wearable computers while driving. According to the attachments, AAA has "serious concerns about the safety elements of these technologies" on the road.

The Delaware legislation, H.B. No. 155, remains in committee. The "Wyoming" article describes the arrest of an individual for distracted driving which did not result in conviction since the police could not prove the device was turned on at the time of the stop.

I recommend that the SCPD send updated information to at least the sponsors of H.B. No. 155 and the Department of Homeland Security. If the Legislature is out of session when the mass marketing of these products begins, there could be lots of accidents and concomitant brain injuries. Consistent with the attached November 12, 2013 News Journal article, nearly one in four drivers is already "surfing while driving" with 49% of drivers ages 18-29 reporting Internet use while driving. The wearable computers will only exacerbate these statistics.
MEMORANDUM

DATE: June 17, 2013

TO: All Members of the Delaware State Senate and House of Representatives

FROM: Ms. Daniele McMullin-Powell, Chairperson
State Council for Persons with Disabilities

RE: H.B. 155 [Distracted Driving: Wearable Computer with Head Mounted Display]

The State Council for Persons with Disabilities (SCPD) has reviewed H.B. 155 which would prohibit operation of a motor vehicle on the highway while using an electronic communication device while the motor vehicle is in motion. Similar legislation was introduced in West Virginia in March, 2013. See attached H.B. 3057. Background on the bill is provided in the attached June 2, 2013 News Journal article. Google has developed a wearable multi-function computer (“Google Glass”) which is worn like glasses with access to the Internet. It is a “hands-free” device. Some traffic safety proponents are concerned that individuals will be distracted if driving with the device. Background on “Google Glass” is provided in the attached Wikipedia article.

There are pros and cons to the legislation. Detractors can cite to enforcement difficulties in trying to ascertain if the device is actually being operated while driving. They can also argue that the device is “safer” to use than a dashboard mounted GPS device or referring to a Smartphone screen for directions. Proponents can cite to the greater potential for distracted driving as operators drive while directing attention to a video screen only inches from their eyes to watch movies, read email, etc.

The SCPD endorses the concept of the bill. While some drivers might only use the devices for GPS directions, Council suspects the majority would use it for extraneous multi-tasking, including checking emails. In turn, this will lead to more accidents and therefore more disabling conditions (e.g. spinal cord and traumatic brain injuries).

Thank you for your consideration and please contact SCPD if you have any questions regarding our position or observations on the proposed legislation.
cc: The Honorable Jack Markell
    Mr. Brian Hartman, Esq.
    Governor’s Advisory Council for Exceptional Citizens
    Developmental Disabilities Council

hb 155 distracted driving wearable computer 6-13-13
Wyoming among states eyeing laws to ban Google Glass while driving

Wed, Jan 29 2014

By Laura Zuckerman

(Reuters) - Sparsely populated Wyoming, whose natural beauty draws tourists from around the globe, is among a small number of U.S. states eyeing a ban on the use of wearable computers while driving, a move that appears to target Google Glass.

Wyoming state Senator Floyd Esquibel, a Democrat who crafted the bill to ban such devices behind the wheel, said he wanted to ensure safeguards are in place before the technology premiered by Google - a tiny computer mounted to an eyeglass frame - is widely available.

"Common sense would tell you that you really don't need to look at a little computer while driving, that it endangers you, your passengers and other drivers," he said of the bill he introduced this month. The legislature will convene to consider new bills in February.

Wyoming is among at least seven U.S. states eyeing restrictions on the technology over concerns that drivers wearing Google Glass may pay more attention to their email or other online endeavors than the road.

Other states considering measures that would ban use of wearable computers while driving are Delaware, Illinois, Missouri, New Jersey, New York and West Virginia, according to the National Conference of State Legislatures.

Google Glass, which projects a small screen above a corner of a wearer's eye, is expected to become a major catalyst for what many believe to be the next big trend in mobile, wearable computing devices.

But in a high-profile California case that raised new questions about distracted driving, one of thousands of people testing Google Glass was ticketed for wearing the device while driving after being stopped for speeding in October.

Cecilia Abadie later got her ticket, for using a "visual" monitor in her car while driving, thrown out because of a lack of proof the device was operating at the time. Her speeding ticket was also dismissed.

DISTRACTED DRIVING

The case nevertheless renewed debate about distracted driving, which was linked to car crashes that caused injuries to an estimated 421,000 people in the United States in 2012, up 9 percent from 2011, according to the National Highway Traffic Safety Administration.

Esquibel, member of a state Senate transportation panel, successfully pushed in 2010 for Wyoming to outlaw driver texting, which is already banned in most states. Some states also ban the use of handheld mobile phones while driving.

He said the proposed ban on the use of wearable computers while driving faces an uncertain fate in a Republican-led legislature in a state known for its ambivalence toward government regulations.

In information about Glass posted online by Google, the company advises those engaged in field tests - dubbed Explorers - to abide by state laws that limit use of mobile devices while driving.

"Above all, even when you're following the law, don't hurt yourself or others by failing to pay attention to the road," the company says.

Asked Wednesday about legislation restricting use of devices like Glass, Google said Explorers should use the device responsibly and put safety first: "Glass is built to connect you more with the world around you, not distract you from it."

U.S. travel group AAA said it has "serious concerns about the safety elements of these technologies" on the road.

"Our feeling and perspective is that safety should take the greater priority over convenience when it comes to using personal electronic technology, particularly when driving," AAA spokeswoman Nancy White said.

(Editing by Cynthia Johnston and Dan Grebler)
NEW YORK -- Google's Internet-connected eyewear Glass is coming to people who need prescriptions to correct their vision.

New spectacles from Google's design team will be compatible with corrective lenses and, thanks to a collaboration with a private insurer, may get some reimbursement from health plans.

"This announcement marks the next step in Glass's evolution and the beginning of a new category of smart eyewear," the firm said.

The tech giant unveiled a partnership with US vision insurer VSP to make prescription Glass and to reimburse some of the costs under health benefits.

"If we had a nickel for every time someone has asked about prescription lenses for Glass... well, we'd have a lot of nickels," said a Google Glass blog post that displayed four lightweight styles.

The new frames will sell for $225, and in some cases users can get reimbursed under their health plan, according to Google.

That does not include the $1,500 price for Google Glass, which is in a test phase with a small number of "explorers" ahead of a wider release sometime this year.

Google said the current explorers can have their Glass fitted with prescription lenses or get newly designed frames.

The Glass team designed four new frames called Bold, Curve, Thin, and Split, and two new shades, or detachable sunglasses.

VSP president Jim McGann said his firm provides coverage to 94 million customers -- one in five Americans -- and would help train and certify retailers as well as reimbursing policy holders.

Google repeated that it is moving towards "a wider consumer launch later in 2014" of Glass.

But the new frames will be available starting Tuesday to the Glass testers.

Glass connects to the Internet using Wi-Fi hot spots or, more typically, by being wirelessly tethered to mobile phones. Pictures or video are may be shared through the Google Plus social network.

During the testing phase, developers are creating apps for the eyewear, which can range from getting weather reports to sharing videos to playing games.

Rob Enderle, analyst at Enderle Group, said he believed the new versions of the eyewear will be "less geeky than the prototype" to appeal to more users.

"This will make the product far less obvious while it also makes it more useful to those that wear glasses, thus it should improve adoption," Enderle told AFP.

Still Enderle said Glass has privacy obstacles to overcome, noting that it "makes people uncomfortable," because the devices appear to be capable of recording what they view.
Avi Greengart, who follows the mobile sector at the research firm Current Analysis, said in a tweet that "adding prescription options for Glass will only be relevant once Glass itself costs less and has a clear use case."

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Google Glass, VSP deal promising, but not wearable big bang

Summary: Google gets distribution for Google Glass, a viable sales channel and an insurance push, but mass market acceptance and pricing isn't a slam dunk.

By Larry Dignan for Between the Lines | January 28, 2014 -- 15:56 GMT (07:56 PST)

Google and VSP Vision Care, an insurer for eye care, have reportedly reached a deal that will offer prescription frames and lenses for Google Glass, those pricey Internet connected specs.

The big win here for Google is that its Google Glass will be embedded into the health care system and subsidized to some degree. The general theme in a New York Times story (http://www.nytimes.com/2014/01/28/technology/google-glass-to-be-covered-by-vision-care-insurer-vsp.html) is that Google will get a lot of distribution and every person will ultimately have Internet connected specs. Meanwhile, Google upgraded frames (https://plus.google.com/photos/+GoogleGlass/albums/5973742934889749841) so Glass doesn't stick out in a crowd as much. Hooray, wearables will go mass market. Earlier: Google puts prescription lenses in Glass' frame (http://www.zdnet.com/google-puts-prescription-lenses-in-glass-frame-7000025667/)

Read more

Google puts prescription lenses in Glass' frame

The Google Glass genie can't be shoved back in the bottle

OK, Glass: How do I stop people calling me a 'Glasshole'?

Exploring Google Glass: A non-nerd's guide (and wish list)
Not so fast.

Sure, Google via VSP will get access to a fifth of insured Americans, but as a veteran of vision care plans I'm willing to bet that the Google Glass price points won't fall enough to go mainstream.

The Times noted that Google will have a consumer version of Glass frames for $225. VSP will reimburse members based on their prescription plan for an average of $120 plus the cost of the lenses. VSP won't subsidize Glass.

However, the real math for Google Glass expenditures gets tricky. Here's how eye-care insurance works today.

- You get frames subsidized and lenses.
- Anything additional will cost you.
- You get a small selection of frames that'll make economic sense.
- If you also wear contacts there's a good chance you won't get reimbursed for frames too.
- Toss in that VSP isn't subsidizing the computer portion of Glass and you're still paying up for lenses, frames and the high-tech part of Glass.

Generally speaking, lenses and frames will run you about $225 with insurance if you keep extras to a minimum. Toss in Glass and it's not a stretch to figure something in the $400 to $500 range all-in. That price tag is certainly cheaper than the $1,500 developer version of Google Glass, but let's not get carried away with the mass distribution theme. Glass is still going to cost you.

Here's a breakdown of VSP individual plans. VSP plans through corporations can be tweaked, but they rhyme with this price schedule.

**VSP Vision Insurance Plans**

<table>
<thead>
<tr>
<th>Copays</th>
<th>Economy</th>
<th>Standard</th>
<th>EasyOptions</th>
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<tr>
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<td></td>
</tr>
<tr>
<td>$30 glasses</td>
<td>$26 glasses</td>
<td>$25 glasses</td>
<td></td>
</tr>
</tbody>
</table>

WellVision Exam® – Covered in full after copay

Basic Lenses – Covered in full after copay

Frames – A wide selection covered

- $120 Allowance
- $160 Allowance
- $120-$200 Allowance

Contacts (instead of glasses, to cover contacts & fitting cost)

- $150 Allowance
- $120-$200 Allowance

Custom Benefit Options

- Choose One: No-line Bifocals (progressive), Lens Tinting or Increase Frame Allowance to $200

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<table>
<thead>
<tr>
<th>Select Your Coverage</th>
<th>Economy Plan Details</th>
<th>Standard Plan Details</th>
<th>EasyOptions Plan Details</th>
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<tbody>
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<td>$32.25/month</td>
<td>$13.92/month</td>
<td>$75.92/month</td>
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<tr>
<td>2 Person</td>
<td>$45.75/month</td>
<td>$24.86/month</td>
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<tr>
<td>Family</td>
<td>$69.25/month</td>
<td>$32.55/month</td>
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</tbody>
</table>

And finally, the VSP coverage also doesn't exactly nullify the privacy worries and the overall cultural issues. Unless you're at Google I/O you still feel like a tool wearing Glass (I'll refrain from going the Glasshole route for now).
Samsung ogles line of sports glasses, a la Google eyewear

By Youkyung Lee
Associated Press

SEOUL, South Korea — A patent filing shows Samsung Electronics Co. is working on a device it calls sports glasses in a possible response to Google’s Internet-connected eyewear.

A design patent filing at the Korean Intellectual Property Office shows a Samsung design for smartphone-connected glasses that can display information from the handset.

It said the glasses can play music and receive phone calls through earphones built into the eye-wear’s frame.

It also gives hands-free control over the smartphone.

Reminiscent of the Google Glass design, Samsung’s sketch shows a thumbnail-sized display over the left eyeglass.

Google’s eyewear has a tiny display over the right eyeglass that shows information and websites.

It was not clear from Samsung’s sketch and description whether its eyewear would be equipped with a touch control and a camera like Google Glass nor whether it would connect directly to the mobile Internet or be a slave to a smartphone.

The name and the description specify the Samsung product is designed for outdoors activities or sports.

Samsung did not respond to an email and a call seeking comment.

Google Inc. is testing an early version of Google Glass with 10,000 people in the U.S. after giving the public a first look at its Internet-connected eyewear in June last year.

The early version can take pictures, record videos, navigate maps and works without a smartphone.

Other tech companies are also exploring ways to bring mobile computing to everyday objects such as watches and glasses.

Samsung introduced a smartphone-connected watch called the Galaxy Gear last month. Sony also announced a smart watch.

Samsung filed the application for the eyewear design patent on March 8.
147th General Assembly

House Bill # 155

Primary Sponsor: Miro
Additional Sponsor(s): Rep. Scott & Sen. Sokola

CoSponsors: Reps. Baumbach, Hudson, Smyk, Mitchell; Sen. Peterson

Introduced on: 05/30/2013
Long Title: AN ACT TO AMEND TITLE 21 OF THE DELAWARE CODE RELATING TO RULES OF THE ROAD AND ELECTRONIC COMMUNICATION DEVICES.

Synopsis: This bill prohibits the use of a wearable computer with a head-mounted display while driving.

Current Status: Out of Committee On 06/12/2013

Full text of Legislation: (in HTML format)
Legis.html

Email this Bill to a friend

Full text of Legislation: (in MS Word format)
Legis.docx (Microsoft Word is required to view this document.)

Fiscal Notes/Fee Impact: Not Required

Committee Reports:
House Committee Report 06/12/13 F=2 M=7 U=0

Actions History:
Jun 12, 2013 - Reported Out of Committee (PUBLIC SAFETY & HOMELAND SECURITY) in House with 2 Favorable, 7 On Its Merits
May 30, 2013 - Introduced and Assigned to Public Safety & Homeland Security Committee in House

HOUSE OF REPRESENTATIVES
147th GENERAL ASSEMBLY

HOUSE BILL NO. 155

AN ACT TO AMEND TITLE 21 OF THE DELAWARE CODE RELATING TO RULES OF THE ROAD AND ELECTRONIC COMMUNICATION DEVICES.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF DELAWARE:

Section 1. Amend § 4176C(b)(2) by making insertions as shown by underlining as follows:

§ 4176C. Electronic communication devices; penalties.

(a) No person shall drive a motor vehicle on any highway while using an electronic communication device while such motor vehicle is in motion.

(b) For the purposes of this section, the following terms shall mean:

(1) "Cell telephone" shall mean a cellular, analog, wireless or digital telephone.

(2) "Electronic communication device" shall mean a cell telephone, personal digital assistant, electronic device with mobile data access, laptop computer, wearable computer with a head-mounted display, pager, broadband personal communication device, 2-way messaging device, electronic game, or portable computing device.

Section 2. Amend § 4176C(b) by making insertions as shown by underlining as follows:

(7) "Wearable computer with a head-mounted display" means a computing device which is worn on the head and projects visual information into the field of vision of the wearer.

SYNOPSIS

This bill prohibits the use of a wearable computer with a head-mounted display while driving.
Drivers using Internet in cars continues to rise

Americans are still surfing while driving. The number of drivers who report using their cellphones to access the Internet while behind the wheel continues to rise. Nearly one of four drivers is going online while driving, according to a national survey that has tracked the potentially deadly practice over the past five years.

Insurer State Farm began asking drivers in 2009 whether they went online while driving. The percentage of drivers who said they do so has nearly doubled, from 13 percent in 2009 to 24 percent this year. Among drivers ages 18-29, that number rose from 29 percent to 49 percent.

There were also jumps in the percentages of people who read or respond to email, and who read or update social media networks while driving. Most research on distracted driving — and most laws against it — have focused on texting while driving, which creates a crash risk 23 times greater than not doing so, according to the National Highway Traffic Safety Administration. Research at Virginia Tech Transportation Institute found that reading or sending a text takes a driver's eyes off the road for an average of 4.6 seconds — long enough to cover the length of a football field at 55 mph. A 2009 study by Road and Driver magazine found that the reaction times of two drivers were faster when they were legally drunk then when reading or sending texts. The increases are driven largely by the growing use of smartphones among drivers 40 and older, says Chris Mullen, State Farm's director of technology research. "It's not just a youthful problem."