EXHIBIT E

U.S. Patent No. 8,552,978

Google Pixel

Claim 10
A method for compensating rotations of a 3D pointing device, comprising:

Google Pixel

Claim 10

generating an **orientation output** associated with an orientation of the 3D pointing device associated with three coordin
global reference frame associated with Earth;

When the orientation sensor is software-based, the **orientation output** is the attitude of the device that can be represent
azimuth, pitch, and roll angles relative to the magnetic North Pole associated with a **global reference frame associated**

Rotation vector

Underlying physical sensors: Accelerometer, Magnetometer, and Gyroscope

Reporting-mode: *Continuous*

`getDefaultSensor(SENSOR_TYPE_ROTATION_VECTOR)` *returns a non-wake-up sensor*

A rotation vector sensor reports the orientation of the device relative to the East-North-Up coordinates frame.
obtained by integration of accelerometer, gyroscope, and magnetometer readings. The East-North-Up coordin
is defined as a direct orthonormal basis where:

- X points east and is tangential to the ground.
- Y points north and is tangential to the ground.
- Z points towards the sky and is perpendicular to the ground.

The orientation of the phone is represented by the rotation necessary to align the East-North-Up coordinates v
phone's coordinates. That is, applying the rotation to the world frame (X,Y,Z) would align them with the phone
coordinates (x,y,z).

Claim 10

generating a **first signal set** comprising axial accelerations associated with movements and rotations of the 3D pointing **spatial reference frame**;

Accelerometer

Reporting-mode: *Continuous*

`getDefaultSensor(SENSOR_TYPE_ACCELEROMETER)` *returns a non-wake-up sensor*

An accelerometer sensor reports the acceleration of the device along the 3 sensor axes. The measured acceleration includes both the physical acceleration (change of velocity) and the gravity. The measurement is reported in the x, y an z fields of sensors_event_t.acceleration.

All values are in SI units (m/s^2) and measure the acceleration of the device minus the force of gravity along the 3 sensor axes.

Source: https://source.android.com/devices/sensors/sensor-types#accelerometer

Sensor Coordinate System

In general, the sensor framework uses a standard 3-axis coordinate system to express data values. For most sensors, the coordinate system is defined relative to the device's screen when the device is held in its default orientation (see figure 1). When a device is held in its default orientation, the X axis is horizontal and points to the right, the Y axis is vertical and points up, and the Z axis points toward the outside of the screen face. In this system, coordinates behind the screen have negative Z values. This coordinate system is used by the following sensors:

- Acceleration sensor
- Gravity sensor
- Gyroscope
- Linear acceleration sensor
- Geomagnetic field sensor

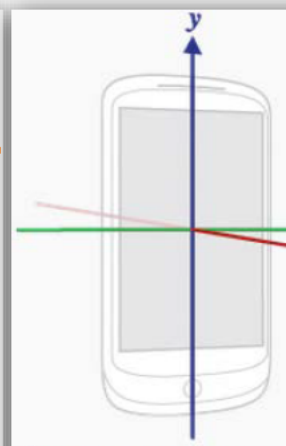

Figure 1. Coordinate sys
device) that's used by th

DOCKET ALARM

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts

Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research

With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips

Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS
Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS
Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS
Sync your system to PACER to automate legal marketing.