Touch screen calibration on embedded platforms

The latest OpenJFX sources in the 8u-dev repository provide touch screen coordinate transforms for embedded Linux devices. This allows the coordinate space of a touch screen to be scaled, translated and flipped. In order to set the transforms for a screen it is first necessary to find out the product ID of the touch screen device. The product ID is a list of four hexadecimal numbers, separated by forward slashes. The numbers are:

- Bus ID
- Vendor ID
- Product ID
- Version ID

The easiest way to find out these numbers for a device is usually to run the following command on the target device:

```
cat /proc/bus/input/devices
```

and then look for a line starting with the characters "I: Bus=" that matches the touch screen. The other way to find out these numbers is to run the `GetEvent` class using OpenJFX:

```
sudo java com.sun.glass.ui.monocle.GetEvent
```

This queries the configuration of all input devices used by JavaFX.

Once you have the touch screen's product ID, you can set the following properties for it:

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>minX</td>
<td>int</td>
<td>the X value returned by the touch driver on the extreme left of the display</td>
</tr>
<tr>
<td>maxX</td>
<td>int</td>
<td>the X value returned by the touch driver on the extreme right of the display</td>
</tr>
<tr>
<td>minY</td>
<td>int</td>
<td>the Y value returned by the touch driver on the extreme top of the display</td>
</tr>
<tr>
<td>maxY</td>
<td>int</td>
<td>the Y value returned by the touch driver on the extreme bottom of the display</td>
</tr>
<tr>
<td>flipXY</td>
<td>boolean</td>
<td>the X and Y axes are swapped if this property is true</td>
</tr>
</tbody>
</table>

Each touch property is set using the system property setting

```
monocle.input.<product ID>.<property>=<value>
```

See [https://javafx-jira.kenai.com/browse/RT-35300](https://javafx-jira.kenai.com/browse/RT-35300)