

Exhibit 31

From: Sangwook Han <whan@nemustech.com>
Sent: Thursday, October 28, 2010 10:57 PM
To: seungyun75.lee@samsung.com
Cc: Woogyun Kho, Chi Hoon Ryu; zaharang@nemustech.com; Aries-frame@nemustech.com
Subject: Re: [List Bouncing] Questions regarding bouncing
Attachments: Screenshot 2010-10-29 PM 2.49.52.png

Hello, this is Sang Wook Han of Nemustech.

Actually since until last weekend, we reviewed the bounce issues and until the day before yesterday, we have been reviewing the deceleration speed issues while on scroll mode.

With regards to bounce, we used the Mass Spring Damper model which was modeled after the actual physical effect and obtained the bounce effect that is similar to the iPad and while a new Scroller (instead of Interpolator) was created but overall impression is that there was no substantial difference from the conventional method of changing the parameter of Interpolator. Accordingly, we did not release it.

The final curve that was used is as follows.

We use only $x=0\sim 1$. The curve where Y is decreasing from 1 was used for the situation of dragging by hand and releasing, and the curve that increases from 0 to 0.75 and then decreases was used for the situation of bounce while scrolling.