〈技術資料〉

ぎらつき抑制アンチグレアコーティング剤とぎらつきの定量評価について

Anti-glare Coatings without Sparkle and a Quantitative Evaluation of Sparkle

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Abstract

In recent years, the display industry has seen the start of full-mass production of LCDs and OLEDs, while technological advancements in high resolution, wide color gamut, high illumination and high contrast technologies for these displays have continued to develop.

The recent trend amongst manufacturers is incorporation of high resolution technology in their displays, while a pixel resolution of over 500 ppi is becoming standard for smartphone displays.

As we directly touch these types of touch panel displays, it is becoming increasingly popular to use anti-glare film, useful for hiding fingerprint marks.

However, due to the high resolution of the displays, an issue has emerged known as Sparkle which is caused by optical interference between the pixels in the image and the coating on anti-glare film. Until recently, the only way of evaluating the amount of sparkle was by visual observation.

Our new system can provide a quantitative evaluation of sparkle and can replicate an image that shows sparkle as if it were seen by the human eye. Through the utilization of anti-glare coating, and data collected with our system, we can explain the relationship between high resolution displays and sparkle.

キーワード：アンチグレアコーティング剤、ぎらつき、ぎらつき定量、高解像度、有機ELディスプレイ

Keywords: Anti-glare coatings, Sparkle, Quantitative evaluation of sparkle, High resolution, OLED display

1.　はじめに

電子ディスプレイは情報化社会において益々重要なツールの一つとなっている。最近は有機ELディスプレイの製品が本格的に立ち上がり、大型のOLED-TVや携帯端末に搭載され始めた。液晶ディスプレイと並び、有機ELディスプレイの時代が到来した。IHSのディスプレ

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