



Tech Trader Daily

News, analysis, and actionable investing ideas.

September 27, 2013, 12:45 P.M. ET

OLED: 'Glaring Confession' Iridium is Naturally Phosphorescent, Says Asensio

By Tiernan Ray

Shares of organic **light-emitting diode** technology maker **Universal Display** ([OLED](#)) are up 21 cents, or 0.7%, at \$32.22, defying a couple of negative articles posted today by noted short-seller **Manuel Asensio**, who has for some years now made the company, and its stock, his White Whale, continually accusing it of being disingenuous about its claims to rights on fundamental elements of the technology.

Today Asensio posts two pieces calling into question the company's claims of innovation.

[In the first essay](#), a rather abstruse technical piece, Asensio argues that the company's claim to have made a breakthrough with Iridium is undercut by prior research that had already revealed the "phosphorescent" properties of the material:

By the time UDC made its "dramatic breakthrough" of using one iridium compound, Ir(ppy)₃, in an existing OLED, not only were organometallic iridium compounds well known to be phosphorescent, but why and how they emitted light from triplet reactions was well understood. In fact, their triplet emission capacity was so well established that scientific research had turned to the synthetic production of commercial quantities of the phosphorescent materials. In order to accomplish this virtually all humanly possible explorations of organometallic phosphorescent compounds were being measured and published including the atomic position of each of the atoms that were bonded to the iridium, the distances between these atoms, the angles at which they bonded and the distances between these bonds. Below are two examples of this work that existed long before 1998 when UDC claimed it made its "dramatic breakthrough."

[In a second essay](#), Asensio [posts a copy of a December, 2012, brief](#) filed on behalf of the company's patent claims by one **Maiwal Patentanwalts** of **Germany** in the company's ongoing legal sparring. In

the brief, Asensio points out, the single sentence “The invention is... not an emitter compound“ (emphasis in original, page 7).”

A fuller version of that passage in the filing is,

The invention is an OLED, not an emitter compound. Regarding the allegation that claim 1 should recite structural features that are necessary in order to obtain a phosphorescent complex, the Opponents appear to opine that th patent is directed to the provision of certain chemical species. The contribution of the present invention to the prior art is the disclosure of a technical device, namely an OLED, which emits light by phosphorescence. The invention is not, per se, directed to the disclosure of compounds which are present.

Asensio interprets that passage in the document as a “**glaring confession and admission**” that the company “simply added an iridium compound to an existing OLED device”:

Analysts mistakenly believe that UDC had something to do with discovering phosphorescence, or phosphorescent materials, or a particular organometallic phosphorescent material well suited for OLED production, such as an iridium-based organometallic phosphorescent compound, or an OLED with an organometallic phosphorescent material. UDC has admitted that it did no such thing.

The upshot of the two posts is that Asensio believes Universal’s broadest claims about owning rights to any OLEDs based on iridium phosphorescence will be thrown out, while it may maintain a narrower right to its particular OLED device, all the various parts that have to be put together to make any use of an organic compound as an LED.