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Copyrights

Copyright Concerns Amidst Rapid Advancements in Cutting-Edge Hologram Technology

Increased use of holograms in concerts and other performances is advancing faster than the law can keep up. In order to take advantage of this cutting-edge technology, users need to be aware of the copyright considerations at play.

BY CHARLES A. LAFF AND BRENDA L. AMBROSIUS

As technology continues to advance at staggering speeds, the law often struggles to keep up. This "law lag" is prevalent in copyright law as it applies to new, creative works in media never before imagined. A timely example of this is the use of holograms in entertainment performances.

During a Brad Paisley concert in Madison, Wisconsin, much to the audience's surprise, Carrie Underwood emerged from backstage to perform a duet with Paisley. Following the concert, it was revealed that, in fact, Underwood had not been in Wisconsin for the concert, but rather a hologram was used to perform the duet. Brad

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Brenda L. Ambrosius is an associate in Michael, Best & Friedrich LLP's intellectual property group, where she focuses her practice on trademark prosecution and enforcement, copyright, and licensing matters. In her practice, Ambrosius counsels clients in a multitude of industries on global brand protection and enforcement strategies. Paisley had been using holograms throughout his tour, starting in 2011, surprising many along the tour route with the realism that the hologram portrayed.

Later in 2012, a now infamous Coachella concert featuring Tupac Shakur 16 years after his death was all the rage. In 2014, Michael Jackson "performed" at the Billboard Music Awards even though he had passed away five years earlier. And it was recently announced that Ronnie James Dio will return to performing in his Dio Returns tour, more than seven years after his death.

Other Uses But it's not just musical performances that are increasingly using hologram technology. In 2014, then Indian prime minister candidate Narendra Modi used hologram technology to appear before hundreds of thousands of potential voters in more than 900 rallies across the country.

And in April of this year, French presidential candidate Jean-Luc Melenchon spoke to potential voters simultaneously in six cities across France using hologram technology.

In fact, hologram technology is being used by performers, political candidates, motivational speakers and corporate executives to reach greater audiences than traditional speaking engagements would allow. As this technology continues to rapidly advance, new legal considerations have evolved.

True Hologram Technology Interestingly, true hologram technology is rarely used in these performances. Instead, the 3D doppelgangers are created by using projected images on screens through the use of computer technology.

A true hologram is "a three-dimensional image formed by the interference of light beams from a laser

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or other coherent light source" that is viewable from all sides.

In contrast, the performances used by artists and politicians are most commonly created by utilizing a technology called Pepper's Ghost. This technology has been around for over a hundred years, although it has greatly advanced in recent years.

The original Pepper's Ghost optical illusion involved placing a large piece of glass at an angle between a brightly lit stage room and a hidden room. The glass reflects the hidden room, kept dark, that holds the "ghostly" scene and as the lights are brought up, the apparition appears.

Today, the technology employs high-quality video projection technology that captures motion images and projects them to large crowds by displaying the graphics through a large scale screen or similar surface.

Instead of relying on physical objects, like animatronics or human beings, performing in a recreated, mirrorimage room including figurative smoke and literal mirrors to create a replica of the performance that can be projected onto a stage, computer generated content is now projected onto high-tech metallic screens using a digital light processing projector.

In the Michael Jackson Billboard performance, for example, the images were based on meticulously detailed computer-generated models and projected on the screen using six, strategically-placed projectors to give the illusion that the King of Pop was moving on his own accord.

Whether through true holograms or Pepper's Ghost projection technology, designers are now creating original performances using computer technology without the use of human models, previously recorded material or other references.

Nick Smith, President of AV Concepts, one of the companies responsible for the Tupac performance, has said that it's possible to take the likeness and voice of a person and digitally create a performance never before seen.

Designers can take artists who have never done concerts before or performed certain songs and, much like computer animation, create completely original movements, facial expressions and performances in a computer program and essentially fabricate a new performance from scratch for a live audience.

Right of publicity and copyright concerns Much has been written about the right of publicity matters associated with holograms, as well as the copyright implications in the recreation of songs and performances. While these are important concerns for the hologram industry, this article focuses on how copyright law applies to the original performances created by hologram designers.

Most of the performances noted above were created by using images and recordings of a live performer and then projecting them to a new audience. But with advancing technology, hologram designers can create a completely new performance never before seen or recorded by the artist.

Copyright law protects "original works of authorship fixed in any tangible medium of expression." There is no specific reference to holograms in the Copyright Act. However, Copyright Circular 40, distributed by the U.S. Copyright Office in 2015, does include "holograms, computer and laser artwork" in the list of examples included under pictorial, graphic and sculptural works.

It is easy to see that holograms are protectable insofar as they result in a tangible creative work. The question is whether the hologram performances created by designers would be considered an original work or a derivative work under the Copyright Act.

Derivative works A derivative work is defined in the Copyright Act as "a work based on one or more preexisting works . . . consisting of . . . modifications, which as a whole, represents an original work of authorship."

Copyright protection in a derivative work extends only to the new or modified material added to the preexisting work and not to the pre-existing material itself. So, a hologram created from prior video recordings or pictures of an artist might enjoy copyright protection in the hologram itself, but the copyright in the underlying reference material would be owned by the original creator of that material. Hologram creators would need the permission of the owners of the underlying copyrights to legally create and exploit the derivative hologram.

When hologram designers use computer technology to create performances without these reference materials, however, the question of whether the work is derivative is less clear. The composition and intricacies of the performance would be originally created by the hologram designer with the help of computer imaging programs, much in the way animators create computeranimated movies.

In these circumstances the hologram performance may fit into the traditional definition of an original work of authorship under the Copyright Act.

IHMA guidelines Copyright concerns are not new to the world of holograms. In fact, the International Hologram Manufacturers Association has put together copyright guidelines to help ensure that all members are complying with laws and also employing common practices when it comes to the creation of holograms and the rights associated therewith.

The IHMA, established in 1993, is open to all manufacturers of holograms, suppliers of equipment and materials for the manufacture of holograms, and hologram converters and finishes. The organization strives to "represent and promote the interests of hologram manufacturers and the hologram industry world-wide."

The IHMA guidelines outline copyright law as it applies to holograms, artwork for holograms and the intermediate steps for creating holograms from prior artwork. In addition, the guidelines cover common situations that may arise in regards to copyright ownership of hologram productions and contract considerations in the formation of holograms and contracted work.

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The guidelines focus almost exclusively on creating commissioned work from prior artwork such as photographs, sound recordings and related references. The guidelines, however, do not appear to address holograms that go beyond simply transforming 2D images and sound recordings into 3D performances, such as holograms completely created within the mind of the hologram designer using a computer program.

Notwithstanding any right of publicity that may exist in connection with use of one's likeness to create the hologram, if the hologram is considered an original work under the Copyright Act, there still remains questions as to ownership rights in the hologram itself and the performance created by the designers.

Compared to most graphic processes, a hologram is unusual in that holograms made from the same reference material could end up being very different in design, color, depth and movement.

As the IHMA guidelines note, there are often several contributing components in a custom-designed hologram and many components which independently would likely be afforded copyright protection—for instance, the commissioning customer's design or artwork, the reference material, if any, used to create the hologram, the sub-master or transfer hologram from which the production masters will be made, the recombined images on a production master and the finished hologram. Separate copyrights could possibly exist in all stages of the hologram production. Typically, there will be a contract specifying whether the commissioned hologram is owned by the designers or the commissioning party. This contract should address copyright ownership at all hologram production stages.

Challenges Thus, with respect to copyright law, the challenge with holograms is not only the everadvancing technology used to create holograms and hologram performances, but also the inherent complexity in the creation of such lifelike works of art.

The complexity of the creation process and the components involved in producing holograms creates a more complicated evaluation of ownership rights and control over the finished product than more traditional original works under the Copyright Act. Contracts for commissioned holograms must be clear and specific to avoid questions as to ownership and control over the finished hologram and the performances therefrom.

As technology continues to advance and holograms are used more regularly, not only in musical performances, but politics, motivational speaking engagements and your own living room, it will be interesting to see how the copyright law will deal with these lifelike works of art.