

Silver News

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Legal Standards for Advertising and Marking Silver in Jewelry

By Suzan Flamm, Senior Counsel, Jewelers Vigilance Committee



JVC

“During the past two years, Jewelers Vigilance Committee has received a number of complaints about ‘silver’ jewelry that, when tested, turned out to be an alloy of small quantities of silver combined with base metals, or base metals covered with sterling silver and advertised as ‘silver-filled.’ ”

Editor's note: With a recent upsurge in base metal alloys fraudulently being sold as silver, especially on line, we asked Jewelers Vigilance Committee Senior Counsel Suzan Flamm to discuss government and private initiatives aimed at stopping these scams. The New York-based Jewelers Vigilance Committee was established in 1917 to educate and protect all levels of the jewelry industry against liability, litigation and to stop negative publicity.

Applying old law to recent developments can be a challenge. This is particularly true in the jewelry industry where new products, combining precious and base metals, are increasingly available. During the past two years, [Jewelers Vigilance Committee](#) has received a number of complaints about ‘silver’ jewelry that, when tested, turned out to be an alloy of small quantities of silver combined with base metals, or base metals covered with sterling silver and advertised as ‘silver-filled.’ A review of existing laws and standards is a good first step to understanding how to be legally compliant in a changing marketplace.

The Legal Landscape: Existing Standards and New Developments

The current U.S. legal requirements that apply to the marking and advertising of products made with silver are contained in two sources. The oldest is the *National Gold and Silver Stamping Act*, enacted in 1906. Among other things, this statute addresses silver fineness and the marking of silver objects. Consequences for violating the *Act* include forfeiture and monetary penalties, as well as criminal sanctions. The statute also provides that competitors, as well as jewelry trade associations, may bring civil lawsuits for violations of its provisions.

The second source of standards is the U.S. Federal Trade Commission's *Guides for the Jewelry, Precious Metal and Pewter Industries*. Since 1996, these *Guides* have provided

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standards for jewelry, and other objects, made of precious metal and stones. Together with the *Stamping Act*, the *Guides* are heavily relied upon by manufacturers and retailers to create an even playing field within the industry, and to protect consumers in the marketplace. Violation of the *Guides* may lead to an FTC civil enforcement action, the imposition of fines and injunctive relief.

This year the FTC will review all the provisions in the *Jewelry Guides*, including those pertaining to silver products. The review process will include an opportunity for public comment. The Jewelers Vigilance Committee, in consultation with its members and other trade associations, will closely examine the *Guides*, and will suggest specific revisions where necessary. Certainly, the provisions regarding silver will require close attention. Information regarding the review process should soon be available on the FTC website at www.ftc.gov.

The existing standards regarding silver, as set forth in the *Stamping Act* and the *Guides*, include the following provisions:

- “Solid Silver” or “Sterling Silver” – these terms may be used only for objects that contain at least 925 parts per thousand pure silver.
- “Coin Silver” – this term is used for objects composed of at least 900, but less than 925, parts per thousand pure silver. These objects may not be marked or described as sterling silver.
- “Silver Plate” or “Silver Electroplate”
 - An object may only be described as silver-plate or silver-electroplate if all significant surfaces contain a plating or coating of silver that is of substantial thickness, meaning thick enough to assure a durable coverage.
 - Silver-plated or silver-electroplated objects may not be stamped with the words “sterling” or “coin,” either alone or in conjunction with other words or marks. Similarly, those words may not be used on any tag, card or label attached to the product, or on any box, package, cover or wrapper used to encase it.

Applying the Law to Industry Products

Traditionally, silver was relatively inexpensive so silver plating was not commonly used in the manufacture of jewelry. As a result, there are no detailed legal standards for products that combine silver over base metals, as there are for products that combine gold with other metals. For example, the FTC *Jewelry Guides* contain several provisions regarding *gold filled*, *gold plate*, *gold wash*, *gold electroplate* and similar products and processes. These provisions include standards as to the minimum amount of fine gold required on each before a particular term may be used. The term *gold filled*, for instance, may only be used when the karat gold constitutes at least 1/20th of the weight of the metal in the entire article. These sorts of provisions are currently absent from the *Guides* regarding silver.

While the specific legal standards may be missing, the products exist. With the price of silver on the rise, many manufacturers are producing jewelry that has silver over or combined with base metals. The sellers of these products must take care not to use terms that are undefined and that are likely to cause confusion, particularly the term *silver filled*. This term has no specific meaning when used for silver products, unlike the term *gold filled*, which is addressed in the *Guides* and does have a specific meaning, as noted above. Buyers might mistakenly assume that the same meaning applies in the context of silver, a misperception that could give rise to government regulatory action or a lawsuit on the part of a competitor.

Conclusion

With new products on the market, the expected FTC review of its *Jewelry Guides* comes at an opportune moment. JVC is pleased that the Silver Institute will be joining JVC’s efforts to examine the *Guides* and to recommend changes to the FTC. The industry would be well served by clear standards regarding items that combine silver and base metals. Contact JVC at www.jvclegal.org for more information about the *Jewelry Guides*, the *Guides* review process, and opportunities to submit comments to the FTC regarding this and other important issues.

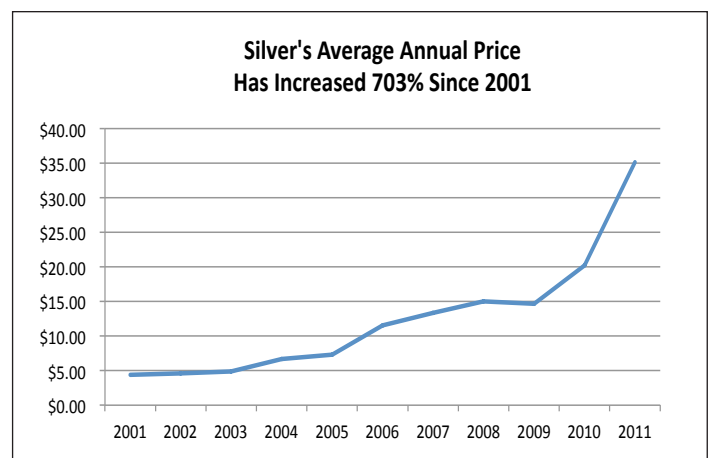
Silver Price Set Record Last Year – Rose 74 Percent over 2010

The average annual silver price for 2011 of \$35.12 per ounce set a record, a 74 percent gain over the 2010 average annual price of \$20.19 per ounce.

Silver outperformed all precious metals in terms of increases of average annual prices: Palladium posted a 39 percent gain in 2011; gold was up 28 percent and platinum rose 7 percent last year over 2010’s figures.

The price rise was pegged to the strong investment demand as well as growth in industrial demand. In a report released in November 2011, *The Silver Investment Market - An Update*, produced by Thomson Reuters GFMS for the Silver Institute, the authors forecasted that world silver investment would reach \$10 billion in 2011, easily exceeding the previous record of \$6 billion set in 2010.

For a free copy of *The Silver Investment Market – An Update* report, visit www.silverinstitute.org.



An Interview with Mr. Gao Huijie, President and CEO of the Shanghai White Platinum and Silver Exchange

For more than ten years the Silver Institute has engaged in a China Market Development Program. The Silver Institute in January hosted a delegation from the Shanghai White Platinum and Silver Exchange with meetings in Washington, D.C. and New York City. Mr. Gao Huijie, the President and CEO of the Shanghai White Platinum and Silver Exchange, gave us this interview after his visit.

SN - Tell us about the Shanghai White Platinum and Silver Exchange.

Mr. Gao - The Shanghai White Platinum and Silver Exchange has been designated a spot silver market by the Chinese government. Essentially, we do the following:

- a. We fix the price for the spot market. Our price affords a broad overall view of the industrial supply and demand in China. Over 1,500 firms, including miners, refiners, manufacturers and retailers, purchase or sell silver according to our price. We have our own Silver Delivery List of certified brands of silver bars that can be delivered in our market. Many refiners have come to us for their brands to be listed.
- b. We provide an electronic platform for our members to buy and sell silver. We have both one-month and one-week contracts.
- c. Our website www.ex-silver.com is the first choice of many institutional investors for silver-related news and research services for investors.

SN - Are you the primary seller of industrial silver in China?

Mr. Gao - We are one of the primary sellers of industrial silver in China. Most well-known silver producers in China sell part of their silver in our market.

SN - China is not only the third largest miner of silver, but also the third largest user of silver. Are Chinese investors becoming more aware of silver?

Mr. Gao - Yes, there is a growing interest in silver among Chinese citizens. Instead of saving money in the bank, people are seeking more ways of keeping their assets intact. Also, the price dips in May and September of last year received lots of media coverage, and I think that's when people started paying more attention to silver.

SN - What brought you to the United States?

Mr. Gao – The United States is the world's financial center. We had always wanted to visit and learn more about silver in the US. We also hoped to become better acquainted with our partner and friend the Silver Institute. I expected a lot from this trip and the arrangements that the Silver Institute made for us more than met my expectations. We realized what an important role the Silver Institute plays and we are very pleased with the cooperation between the Shanghai White Platinum and Silver Exchange and the Silver Institute.

SN - What were the highlights of the trip?

Mr. Gao - There were many, including our meetings on Capitol Hill and visiting with the Washington, D.C.-based member company representatives of the Silver Institute, to touring the CME in New York City. I especially enjoyed visiting with Geoff Burns, the CEO of Pan American Silver and the Institute's current President, and Michael Barlerin of the Silver Institute's Silver Promotion Service in New York City. It was also good to meet with HSBC and Mitsui in New York. We talked about investment and the economy in China, America, Canada and South America. We look forward to similar opportunities.

SN -The Silver Institute enjoyed working with you on the 10th China International Silver Conference. We think the relationship between the Silver Institute and our Chinese partners is strong. Do you agree?

Mr. Gao - Absolutely. We've always enjoyed working with the Silver Institute and its member companies and we are hoping to maintain a long-term, large-scale partnership with the Silver Institute including hosting conferences together, promoting investment and enhancing strategic communication. We sincerely hope that we can work together to extend the influence of the Silver Institute in China for the benefit of both groups.



Delegation from the Shanghai White Platinum and Silver Exchange visit with Washington, D.C.-based officials.
L-R Jonathan Jachym, CME Group; Michael Brown, Barrick Gold Corporation; Michael DiRienzo, Silver Institute; MaryBeth Donnelly, Newmont Mining Corporation; Elin Ren, Shanghai White Platinum and Silver Exchange; Gao Huijie, Shanghai White Platinum and Silver Exchange; Chris Krueger, Guggenheim Securities; Paul Bateman, Silver Institute.

Silver Being Tested in Fight Against Cancer

Researchers at the University of Leeds, UK, have shown that silver compounds are toxic to cancer cells in ways similar to that of the platinum-based drug Cisplatin, which is widely used to treat different cancers but has unpleasant side effects for patients.

Although effective against cancers of the lungs, breast, bladder, testicles, head and neck, ovaries and lymph nodes, Cisplatin's side effects include nausea, vomiting, kidney damage and infection. "As many are unfortunately aware, chemotherapy can be a very grueling experience for the patient," said Charlotte Willans, who is leading the study. "Finding effective, yet non-toxic drugs is an ongoing problem, and these preliminary results are an important step."

She is studying the structure which surrounds the silver atom to learn precisely which part of it reacts with and is the most effective against cancer cells.

The research involves exposing breast and colon cancer cells to different silver-based chemicals for six-day periods. So far, researchers have learned that certain *ligands* – molecules that bond with other molecules – which are coordinately bonded to the central silver atom through two sites are more effective than those bonded through only one site.

A major hurdle to the continued development of these cancer-fighting compounds is understanding precisely how they work, Willans said. Over the next 12 months, she and her team will focus on how the compounds attack cancerous cells and what effects they have on healthy cells.

This work is being carried out in collaboration with Roger Phillips at the University of Bradford and is funded by Yorkshire Cancer Research, a UK-based charity.

You Can't Have A Magnet Made From Silver – Or Can You?

Metals are often divided into two groups - ferrous, meaning iron, and non-ferrous - and for centuries scientists believed that only iron or iron alloys could be magnetized. Now, however, Irvine, California-based Paramount Discoveries, a subsidiary of [Itonis, Inc.](#) has begun the process to obtain patent rights to magnetize silver with its electro-magnetic frequency technology (EMFT).

"We last announced plans to patent our carbon magnetization technology. It makes perfect business sense to patent the proprietary technology for silver, too," said Mark Cheung, Itonis President and CEO. "We are excited that the technologies covering carbon and silver reach diversified industrial markets and will allow the company to expand its licensing outreach."

Because of silver's unique properties, it is nearly impossible to magnetize it, Cheung said, adding that the company's new ability to magnetize silver would allow its use across many industrial and medical applications. For example, magnetized surgical instruments made of silver would not only be able to pick out small pieces of iron during trauma surgery but the silver would not contribute to further infection.

TATA's Inexpensive Nanosilver Water Filters Reach a Half-Million Sold

India's TATA Group has sold more than a half-million water filters called the TATA Swach which uses nanosilver to keep the filtering mechanism free of bacteria. The Swach is aimed at those who do not have safe drinking water in their communities, according to company officials.



Click on photo to see the TATA Swach water filter in action

The key component is the Swach Bulb. Purification takes place when water is dropped through the Bulb, which consists of carbon from burnt rice husks and nanosilver, which can remove microbes including cholera, E-Coli and the rotavirus.

The Bulb can purify up to 3,000 liters of water and will cease working when it is no longer effective. This is the indication to replace the Bulb, so, unlike other filters it cannot process water unless it is operating correctly. The filter can also indicate when its lifespan is nearing an end, thus allowing the user to buy a new Bulb in plenty of time. The Bulb also has an anti-counterfeiting indicator which assures that consumers are using the real Bulb and not a fake which may not produce safe water.

The filtering system costs about US\$20 and replacement Bulbs cost \$7.

Silver Gets You Off the Grid

An accessory from California-based [MIAmobi](#) promises to keep you off the grid by blocking your mobile phone from communicating with cell towers – which they do even when you're not talking or texting.

Mobile phones stay in contact with nearby cell towers when you are not using them for communication. This continuous connection is necessary to accept incoming and outgoing calls but it also can be used to track phone users. Company officials say that placing your phone in the *The SilentPocket* prevents it from transmitting or receiving signals because radio waves cannot penetrate the nanosilver-imbedded fabric. One of the main advantages – besides privacy - is that users can quickly 'turn off their phones' by placing them in the bag without pressing buttons and waiting for the unit to power down. Once removed from the bag, the phone is back on line.

The bags also block signals from reaching RFID chips which are now part of many credit cards. This keeps thieves from grabbing information from the chip or using it to transact a purchase.

The SilentPocket is available in four different styles - ID holder, Suit, Small Dual Zipper Bag and Large Dual Zipper Bag - which retail from \$65 to \$150. They come in brown or black leather with additional styles coming.



The Silent Pocket uses imbedded silver to quickly 'turn off' your mobile phone.

Salmon DNA and Silver Used to Produce Microscopic-Sized Memory Chip

As memory chips get smaller, we are approaching the limit to how tiny they can be manufactured using traditional semiconductor materials like silicon, so scientists have been experimenting with using biological materials because they can be made one cell thick.

Researchers from Taiwan's National Tsing Hua University and Germany's Karlsruhe Institute of Technology have produced a Write-Only memory device that uses salmon DNA coated with silver ions and placed between electrode layers.

When ultraviolet light is shined on the DNA/silver ion sandwich, the silver atoms condense and form nanoparticles. They become electrically charged into an 'on' state as other sections, not hit by light, remain in the 'off' state. These off and on states are the 'zeroes' and 'ones' of digital storage.

Once placed in a 'zero' or 'one' state, the device cannot be altered no matter how much additional light is shone on it which means that the memory remains intact indefinitely and cannot be written over.

Self-Cleaning Jeans Almost Here

Chinese scientists have developed a self-cleaning cotton that is covered in a special titanium dioxide/nitrogen and silver iodide coating that breaks down dirt and stains when exposed to sunlight. Self-cleaning cotton has been around for a few years, but it was of limited use as it only cleaned itself properly when exposed to UV light, which makes up a fraction of the sun's output. So, scientists have added silver and iodine to the titanium dioxide/nitrogen coating and found it could trigger rapid and effective cleaning in ordinary sunlight.

Silver iodide is used in photographic film because it absorbs many parts of the visible and invisible light spectrum. Scientists used this property to allow more light into the fabric.

During tests, after just two hours of sunlight exposure, an orange stain had vanished from the coated fabric but was still stuck firmly to untreated cotton, according to a study published in the American Chemical Society journal [Applied Material & Interfaces](#).

Deyong Wu of the Hubei University for Nationalities and Mingce Long Shanghai Jiao of Tong University said the clothing material remained intact even after repeated washing and drying. Titanium dioxide and nitrogen are the main agents that breakdown dirt and kill microbes when exposed to some types of light, but it wasn't until the addition of silver iodide that the process sped up as more light waves were absorbed. "Currently, silver iodide as a visible-light photocatalyst has attracted a great deal of interest in the field of photocatalysis. And several researchers have prepared the photocatalysts Silver Iodide/Titanium Oxide, which are very stable under light irradiation and show high efficiency for the degradation of dyes and killing of bacteria," the authors wrote. They noted that more development is required before self-cleaning cotton fabrics hit the stores.

Silver-Coated Spheres Help Prevent Tank Fires

The Austrian company SAFEBALL Technology GmbH has introduced a product that uses silver-coated spheres composed of carbon nanotubes to keep large fuel tanks from exploding.

The 30 mm spheres are placed inside tanks and take the place of metal mesh or plastic foams that have been used for more than 40 years to prevent the ignition of gas mixtures by static electricity, vehicle crashes or exposure to heat.



Click on photo to see how SAFEBALLS work

A tank filled with SAFEBALLS cannot explode, because the spheres disrupt the breezeless environment needed for fires to grow from sparks and small flames. The electrical conductivity of the SAFEBALLS also prevents a static discharge inside the container, thereby eliminating the risk that an explosive gas/air mixture will be ignited by an electrostatic discharge. In addition, SAFEBALLS reduce the evaporation of liquids in the tank and the release of hydrocarbon gas into the environment as part of the tank 'breathing,' which contributes to pollution reduction, company officials say.

The coating of silver not only keeps the spheres electrically conductive but reduces the growth of fungi and algae which are common in tanker trucks carrying liquids. The SAFEBALLS can be easily sucked out of the tank for cleaning and then reintroduced again after tank maintenance work is complete. SAFEBALLS do not wear out and are maintenance-free, according to company officials.

Industry News

Silver Wound Dressings Market to Grow

The world market for moist wound dressings estimated to be over \$4 billion in 2010 is projected to grow by another billion by 2015. The most common are silver dressings which actively release silver ions, according to [Moist Wound Dressings Market Worldwide: Market Research Report](#).

Antimicrobial dressings that can prevent infection or reduce bacteria in infected wounds are in high demand, the report noted. These dressings are effective against MRSA (methicillin-resistant *staphylococcus aureus*) and other antibiotic-resistant pathogens.

Brand-to-brand variation within the same dressing category appears to be minimal, creating intense competition for most types of advanced wound dressings. The report provides market estimates and forecasts, competitive strategies and market share of leading companies. It also discusses technology and utilization trends on a global level.

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