

# Sterling performance is challenged after 700 years

**Carl Mortished**  
World Business Editor

One of the less pleasant tasks of a butler is polishing silver, but if Richard Leyens has his way, Jeeves will be out of a job. The telltale grey smudge that is revealed by rubbing a thumb over silver will vanish for ever with the arrival of Argentium, an alloy that is purer than sterling, hard as steel and does not tarnish with age.

Since the 13th century, the standard of silver purity is sterling, or 925 silver parts per thousand (92.5 per cent). That is obsolete, Mr Leyens reckons, because of an alloy of silver and germanium, which creates a metal that is twice as strong as sterling silver and capable of being fashioned into sturdy objects, such as wristwatches or furniture. It is tarnish-resistant and, as an added bonus, contains more precious metal.

Argentium is 97 per cent silver, and Argentium International, a company of which Mr Leyens is chief executive, this week launched the first marketing campaign for Argentium 970 — Pure Silver. Talks are under way to sign up luxury brands — Mr Leyens will not reveal any names, but the usual suspects — Gucci, Tiffany, Cartier and George Jensen — are likely to be involved. Cookson, the metals manufacturer, has been licensed to produce Argentium on a large scale.

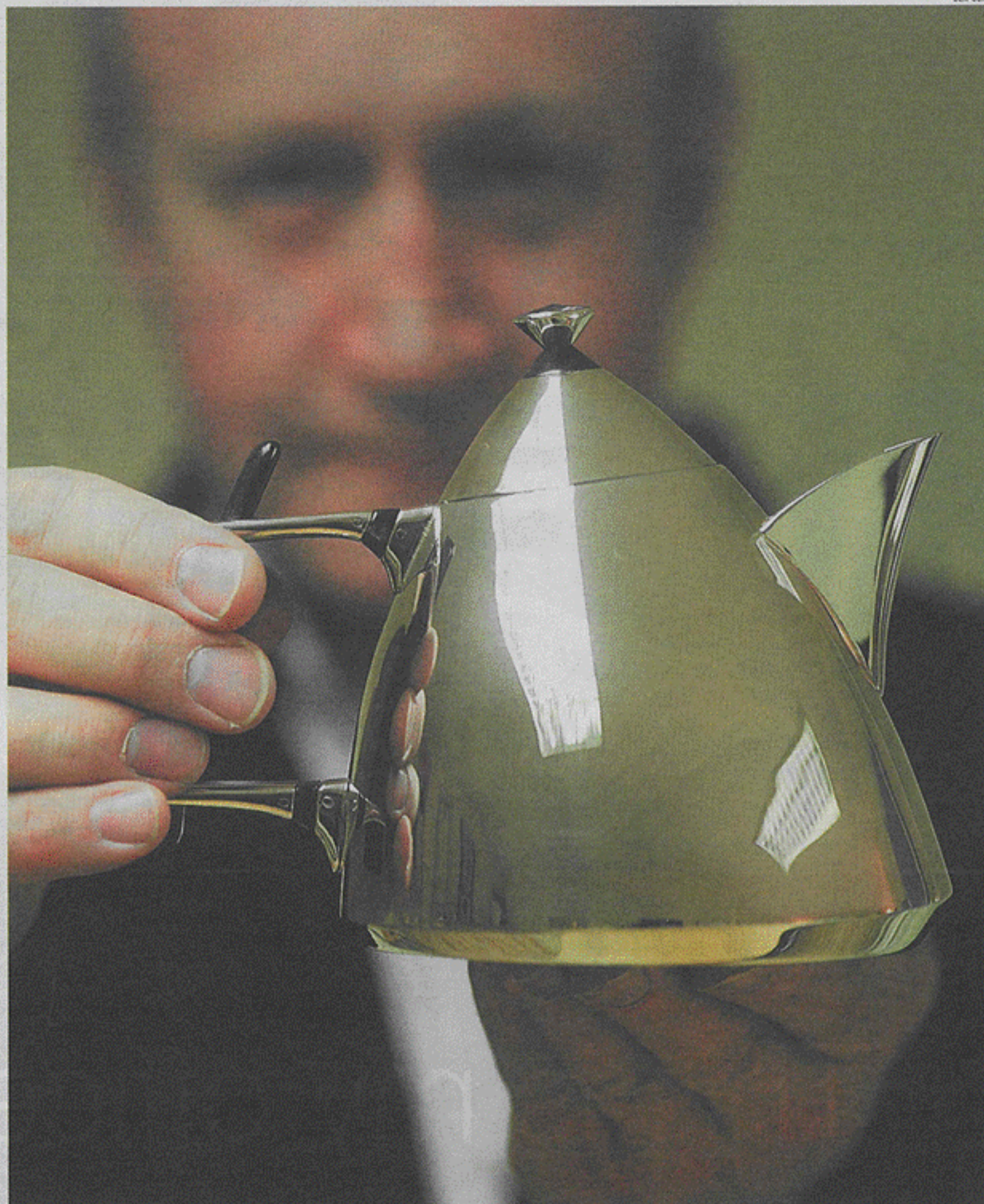
Argentium International owns the patent to the alloy and the intention is to get production running by the middle of next year, with a target of selling a million ounces in the first 12 months.

"We believe it is the beginning of a silver revolution," he said. The ambition is that Argentium be the "gold" standard or endorsement brand for silver, much as De Beers is associated with diamonds or Intel with computers. White metals, such as platinum or white gold, are fashionable, but silver has always been the country cousin of the kings of precious metal because of its softness and the smudge.

Copper is the villain. Pure silver, 999 parts per thousand, is too soft to be useful and base metals such as copper or nickel are added. It is the oxidising of copper in sterling silver that discolours the metal.

The solution was found as recently as 1991 by Peter Johns, a silversmith who did experiments at Middlesex University with germanium, a metalloid used in optics and electronics. He found that oxidised germanium produced a protective coating that prevents copper from oxidising. Argentium incorporating germanium contains less copper, appears whiter and is much stronger. "We should ask Uri Geller to try and bend an Argentium spoon," Mr Leyens joked.

The new silver is a bit more expen-



Richard Fox, of Croydon, shows off a teapot he made in Argentium, an alloy stronger and purer than sterling silver

sive than sterling but much cheaper than platinum or gold. Argentium is strong enough to hold gemstones, opening up markets for silver in wedding bands for those unable to afford platinum.

Richard Fox, who makes Formula One race trophies at his workshop in Croydon, believes that the alloy will transform his business, eliminating

fire stain, a discolouring that emerges when sterling silver is heated. "It's as important as the discovery of silver," he said. "It works 20 per cent more easily and it is stronger, something between sterling and steel."

All sorts of products are possible, he reckons, including watches, lamps, sprung bracelets and spectacles.

Mr Fox also makes the Spirit of

Ecstasy mascots for Rolls-Royce cars and Argentium is an obvious candidate material for the figures, as well as other parts of the vehicle. He also hopes to make a replica Formula One championship trophy for Lewis Hamilton (the original remains with the sport's organising body).

One fly in the ointment is the hallmark because the Birmingham Assay

## Allure of a 'noble metal'

**Analysis** Carl Mortished

**P**recious metals tend to do well in financial downturns, but each is different because of their different markets. The world's gold is bought mostly for adornment and investment, the biggest consumers found in Asia, notably the Indian wedding market.

Platinum is primarily an industrial metal, driven by car manufacturing, where it is used in catalytic converters. The platinum price, which soared last year, has suffered from the sharp downturn in the industry.

Silver is similar. Of the 844 million ounces produced last year, only 163 million went to the jewellery trade; industry consumed 455 million. Silver is an excellent electricity conductor, better than copper, and is used in printed circuit boards as well as to coat CDs and DVDs.

Over the past two years silver has enjoyed a huge price rally, reaching more than \$20 an ounce last March as the wider investor excitement over commodities brought speculators into the market. Although industrial demand is expected to suffer in a recession, the outlook for supply is also weak, and GFMS, the precious-metal consultancy, has forecast a recovery in silver from present levels of less than \$10 an ounce to \$13 an ounce next year.

For the backers of Argentium, the new silver alloy, the challenge is to attract jewellery buyers in a recession who might be put off by the high price of other precious metals. "It is cheaper, but you are still buying a noble metal," Richard Leyens, the chief executive of Argentium, said.

Office is unable to provide a mark accurately reflecting the purity of Argentium. The purest silver mark is Britannia 958, which dates from the 17th century, but that is below the 970 purity of Argentium.

"It is annoying that we have to undersell it, but it takes an Act of Parliament to create a hallmark," Mr Leyens said.