

Title (en)
MATERIAL COMPRISING A THIN LAYER OF AN ALLOY COMPRISING TITANIUM AND GOLD AND METHOD FOR OBTAINING SUCH A MATERIAL

Title (de)
MATERIAL MIT EINER DÜNNEN SCHICHT AUS EINER TITAN- UND GOLDHALTIGEN LEGIERUNG UND VERFAHREN ZUR HERSTELLUNG SOLCH EINES MATERIALS

Title (fr)
MATERIAU COMPRENANT UNE COUCHE MINCE D'UN ALLIAGE COMPORTANT DU TITANE ET DE L'OR ET PROCEDE D'OBTENTION D'UN TEL MATERIAU

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Abstract (en)
[origin: WO2018162745A1] The present invention relates to a material comprising a base substrate and a thin layer of an alloy with atomic formula $Ti_{1-x}Au_x$, 1-x and x being atomic fractions, x being comprised between 0.22 and 0.28. The present invention also relates to a method for obtaining such an alloy, said method comprising in particular, after having deposited a substrate to be covered, two target substrates made of pure titanium and a target substrate made of pure gold in a deposition chamber: adjusting the pressure in the deposition chamber; injecting an inert gas into the deposition chamber; bombarding the first target substrate of pure titanium by a first magnetron; bombarding said target substrate of pure gold by a second magnetron; bombarding the second target substrate of pure titanium by a third magnetron, so as to cause the formation of a plasma containing titanium ions and gold ions having predetermined stoichiometric ratios; and depositing a thin layer of the alloy on the substrate to be covered.

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