

Title (en)  
METHOD AND APPARATUS FOR TESTING COINS

Title (de)  
VERFAHREN UND VORRICHTUNG ZUM PRÜFEN VON MÜNZEN

Title (fr)  
PROCEDE ET APPAREIL POUR TESTER DES PIECES DE MONNAIE

Publication  
**EP 0603340 B1 19951213 (EN)**

Application  
**EP 92922260 A 19921015**

Priority  
• US 9208783 W 19921015  
• US 86855192 A 19920414

Abstract (en)  
[origin: WO9321608A1] A method of testing a coin (10) in a coin testing mechanism, comprising subjecting a coin (10) inserted into the mechanism to an oscillating field generated by an inductor (104), measuring the reactance and the loss of the inductor (104) when the coin (10) is in the field, and determining whether the direction in the impedance plane of a displacement line, representing the displacement of a coin-present point (b, c, d) which is defined by the measurements, relative to a coin-absent point (a) representing the inductor reactance and loss in the absence of a coin, corresponds to a reference direction in the impedance plane. The reactance and loss measurements may be taken by a phase discrimination method. Techniques and apparatus are disclosed for compensating for phase error in the phase discrimination, for measuring the direction of the displacement line relative to a different axis, for applying offsets to achieve advantages in signal handling, for making the measurements thickness-sensitive, and for using the change in reactance as an additional coin acceptance criterion. Some of these refinements are usable independantly of the phase discrimination method.

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CPC (source: EP)  
**G07D 5/08** (2013.01)

Citation (examination)  
• US 3749220 A 19730731 - SAITO T, et al  
• US 4409543 A 19831011 - SUGIHARA NORIYUKI [JP]  
• US 4460080 A 19840717 - HOWARD GEORGE R [GB]  
• US 4946019 A 19900807 - YAMASHITA RIICHIRO [JP]  
• US 5048662 A 19910917 - YAMASHITA RIICHIRO [JP], et al

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