Claims

1. A data carrier (1), especially a security document, comprising a first side (8, 8') and a second side (9, 9') opposite to the first side and a plurality of layers (2, 3, 5, 2a', 2b', 3a', 3b', 4a', 4b', 5a', 5b') provided with authentication data, said plurality of layers comprising transparent recording layers (5, 5a', 5b'), a transparent plastic upper layer (2, 2a'), and an opaque layer (3, 3a') between one of the recording layers (5, 5a') and the upper layer (2, 2a'), said opaque layer (3, 3a') comprising a window (7, 7a'), the authentication data being divided between said plurality of layers (2, 3, 5, 2a', 2b', 3a', 3b', 4a', 4b', 5a', 5b') so that said authentication data (10) is partly, to at least one part (10B, 10B') thereof, provided above or on the first side of the opaque layer (3, 3a') facing the upper layer (2, 2a'), at least a rest part (10A, 10A1', 10A2') of the authentication data (10) being in the form of laser engraved markings (10Aa, 10A1a', 10A2b') beneath the window (7, 7a') and provided in the recording layer (5) or in a plurality of transparent recording layers (5a', 5b') of said plurality of layers, characterized in that said recording layers (5a', 5b') are non-doped transparent PVC layer and comprise a first recording layer (5a') and a further recording layer (5b'), said data carrier (1) further comprising a second opaque layer (3b') between the further recording layer (5b') and a

second transparent plastic layer (2b') that is arranged between the further recording layer (5b') and the second side of the data carrier(1), and a second window (7b') between the further recording layer (5b') and the second side (9') of the data carrier (1), said second window (7b') of the second opaque layer (3b') is aligned with the window (7a') of the opaque layer (3a') enabling looking from the second side (9') to the first side (8') of the data carrier (1) through the second window (7b') of the second opaque layer (3b') and the transparent window (7a') of the opaque layer (3a').

2. A data carrier (1) according to claim 1, characterized in that it comprises an array of lenticular elements (13, 13') being arranged at the first side (8, 8') of the data carrier (1), above the window (7, 7a'), to provide from a predetermined angle of view (a) an image of the rest part (10A, 10A1', 10A2') of said authentication data (10).

3. A data carrier (1) according to claim 1 or 2, characterized in that the recording layer (5) is a doped transparent PC layer.

4. A data carrier (1) according to claim 1 or 2, characterized in that the recording layer (5) is a non-doped transparent PVC layer.

5. A data carrier (1) according to claim 4, characterized in that the thickness (D) of the recording layer (5) is 100 to 800 μιη.

6. A data carrier (1) according to claim 4, characterized by a transparent PET layer (4) between the recording layer (5) and the upper layer (2).

7. A data carrier (1) according to claim 6, characterized in that the thickness (d) of the upper layer (2) is smaller than the thickness (D) of the recording layer (5), and the thickness (S) of the PET layer (4) is smaller than the thickness of the recording layer (5).

8. A data carrier (1) according to claim 6 or 7, characterized in that the thickness (D) of the recording layer (5) is 150 to 600 μηι, the thickness (S) of the PET layer (4) is 0.25 to 0.9 times the thickness (D) of the recording layer (5), and the thickness (d) of the upper layer (2) is 0.2 to 0.6 times the thickness (S) of the PET layer (4).

9. A data carrier (1) according to claim 1, characterized in that the thickness (Da') of the first recording layer (5a') is 100 to 600 μιη and the thickness (Db') of the further recording layer (5b') is 100 to 600 μιη, the combined thickness (Da' + Db') of the first recording layer (5a') and the further recording layer (5b') being 200 to 800 μιη.

10. A data carrier (1) in the form of a security document according to any preceding claim, c h a r a c t e r i z e d in that the security document is in the form of a card and in that said one part of authentication data (10) is visible by a naked eye and in that said rest part (10A, 10AΓ, 10A2') of said first piece of authentication data (10) is formed of a plurality of laser markings (10Aa, 10A1a', 10A2b').