Claims

1. Surface structure of a ground surface (106), which is located in the short final of an approach to a runway (101), with an associated runway start (104) and a runway longitudinal axis (102), characterized in that:
- the surface structure is arranged in the approach immediately before the runway threshold,
- the ground surface (106) comprising the surface structure has the following length and width dimensions: length dimension in the range of 0.5 - 2.5 km, width dimension in the range of 25-1000 m,
- the surface structure comprising a multiplicity of separate elevations (105) with an elevation height (h) in the range of 1 m - 10 m, wherein the individual elevations (105) have a spacing (a) between them, in the range of 1-600 m.

2. Surface structure according to Claim 1,
characterized in that the ground surface (106) is a rectangular area.

3. Surface structure according to Claim 1 or 2,
characterized in that the longitudinal axis of the ground surface (106) is identical to the runway longitudinal axis (102).

4. Surface structure according to one of Claims 1-3,
characterized in that the elevations (105) vary statistically with regard to their arrangement, elevation height (h) and/or their spacing (a), particularly in periodic patterns.

5. Surface structure according to one of Claims 1-4,
characterized in that the elevations (105) are formed as mounds of earth, bushes, trees and/or as artificial objects of any type.

6. Surface structure according to one of Claims 1-5,
characterized in that the elevations (105) are arranged with their respective longitudinal axis parallel to the runway longitudinal axis (102).

7. Surface structure according to one of Claims 1-3 or 5-6,
characterized in that the elevations (105) are arranged on both sides relative to the runway longitudinal axis (102) in each case in at least one row parallel to the runway longitudinal axis (102).

8. Surface structure according to one of Claims 1-7,
characterized in that the elevation heights (h) of the elevations (105) vary sinusoidally along the runway longitudinal direction.

9. Surface structure according to Claim 7,
characterized in that a wavelength(s) of the sinusoidal variations of the elevation heights (h) is/are in the range of 1-600 m.

10. Surface structure according to Claim 9,
characterized in that the wavelength is 400 m ± 15 m, wherein the elevation height (h) varies up to a maximum elevation height (h) of 5 m.

Claims:

1. A structured ground surface (106) for accelerating decay of wake turbulence, the structured ground surface is located in a short final of an approach direction before a runway (101), the runway (101) having an associated runway start (104) and a runway longitudinal axis (102), the structured ground surface (106) comprising a multiplicity of separate elevations (105) with an elevation height (h) in the range of 0.25 m - 10 m and a spacing between the separate elevation in a range of 1 m – 600 m, wherein the separate elevations (105) are arranged in at least one row on each side of the axis, and wherein the elevations (105) are arranged with their respective longitudinal axis parallel to the runway longitudinal axis (102).

2. Structured ground surface according to Claim 1,
wherein the ground surface (106) is a rectangular area.

3. Structured ground surface according to Claim 1 or 2,
wherein the longitudinal axis of the structured ground surface (106) is identical to the runway longitudinal axis (102).

4. Structured ground surface according to one of Claims 1 - 3,
wherein the elevations (105) vary statistically with regard to their arrangement, elevation height (h) and/or their spacing (a), particularly in periodic patterns.

5. Structured ground surface according to one of Claims 1 - 4,
wherein the elevations (105) are formed as mounds of earth, bushes, trees and/or as artificial objects of any type.

6. Structured ground surface according to one of Claims 1 - 5,
wherein the elevation heights (h) of the elevations (105) vary sinusoidally along the runway longitudinal direction.

7. Structured ground surface according to Claim 6,
wherein a wavelength(s) of the sinusoidal variations of the elevation heights (h) is/are in the range of 1 - 600 m.

8. Structured ground surface according to Claim 7,
wherein the wavelength is 400 m ± 15 m, wherein the elevation height (h) varies up to a maximum elevation height (h) of 5 m.