

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte THOMAS GEBELE, JURGEN HENRICH,  
STEFAN BANGERT, JURGEN HONEKAMP, ELISABETH BUDKE,  
JURGEN ULRICH and HELMUT GRIMM

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Appeal No. 2004-2379  
Application No. 09/710,769

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ON BRIEF

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Before KIMLIN, WARREN and WALTZ, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 13, 14, 17 and 25-27. Claims 2-6, 11, 12, 15 and 16 have been allowed by the examiner, while claims 20-23 stand objected to as being dependent upon a rejected base claim. In addition, claims 7-10, 18, 19, 24 and 28-33 stand withdrawn from consideration.

Claim 1 is illustrative:

1. An electrode arrangement for the plasma-aided coating of a substrate with a layer, comprising:

at least a first and a second material component which produces a plasma discharge;

an anode arrangement which defines said first

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material component at an anode material surface for evaporation;

a cathode arrangement which defines said second material component at a cathode material surface, said cathode material surface being constituted by an evaporation-active part supporting the plasma discharge and an evaporation-inactive part not supporting the plasma discharge;

a gas supply for supplying protective gas in front of the cathode material surface to the evaporation-active part of the cathode material surface; and

a baffle arrangement exposing said evaporation-active part at a baffle opening for the plasma discharge and shading of the evaporation-inactive part correspondingly from the plasma discharge;

wherein said protective gas is so introduced into an intermediate space between the baffle arrangement and the cathode material surface that said supplied protective gas escapes at least partially through the baffle opening towards the plasma discharge from the intermediate space between the cathode material surface and the baffle arrangement.

In the rejection of the appealed claims, the examiner relies upon the following references:

Akamatsu, et al. (Akamatsu)	JP 11-100661	Apr. 13, 1999
Heinrich, et al. (Klaus)	WO 00/46418	Aug. 10, 2000 (filed Feb. 05, 1999)

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Appellants' claimed invention is directed to an electrode arrangement for the plasma-aided coating of a substrate. The arrangement employs a gas supply for protecting the front of the cathode from unwanted deposition of material. The protective gas is supplied through an intermediate space between a baffle arrangement and cathode material and escapes through the baffle opening towards the plasma discharge.

Appealed claims 1, 13, 14 and 17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Akamatsu. Claims 25-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Akamatsu in view of Klaus.

We have thoroughly reviewed the respective positions advanced by the appellants and the examiner. In so doing, we concur with appellants that the examiner has failed to establish a prima facie case of anticipation and obviousness under U.S.C. § 102 and 35 U.S.C. § 103 respectively. Accordingly, we will not sustain the examiner's rejections.

We consider first the examiner's rejection under § 102. We are in complete agreement with appellants that the gas emanating through cathode 5 of Akamatsu through the opening in the cathode section or enclosure 2 fails to meet the claim requirement for

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introducing the protective gas into an intermediate space between the baffle arrangement and cathode material surface such that the gas escapes through the baffle opening from the intermediate space. Akamatsu does not describe cathode section 2 as a baffle, and we do not find that the space into which Akamatsu's gas projects can be fairly interpreted as between any baffle arrangement and the cathode material. Also, we agree with appellants that the examiner seems to define the passage between enclosure 2 and chamber 1 of Akamatsu to be both the baffle opening and the intermediate space. However, as explained by appellants, "[t]he gas cannot escape through one area *from* another area if these areas are the same" (page 2 of reply brief, last 2 sentences).

The examiner's citation of Klaus in support of the § 103 rejection of claims 25-27 does not remedy the basic deficiency of Akamatsu described above.

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In conclusion, based on the foregoing, we are constrained to reverse the examiner's rejections.

REVERSED

EDWARD C. KIMLIN	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
CHARLES F. WARREN	)	APPEALS AND
Administrative Patent Judge	)	INTERFERENCES
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	)	
THOMAS A. WALTZ	)	
Administrative Patent Judge	)	

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