

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SONG Q. SHI, CHAN-LONG SHIEH,
and HSING-CHUNG LEE

Appeal No. 1998-2876
Application No. 08/592,930

ON BRIEF

Before GARRIS, PAK, and BLANKENSHIP, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1-24 which are all of the claims remaining in the application.

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The subject matter on appeal relates to an organic thin film transistor comprising a source electrode and a drain electrode positioned in spaced apart relationship on a film of organic semiconductor material with uniaxially aligned molecules that are aligned between the source and drain electrodes in a direction from the source to the drain electrodes and an orientation film positioned adjacent the film of organic semiconductor material so that molecular uniaxial alignment of the film of organic semiconductor material is achieved. Further details of this appealed subject matter are set forth in representative independent claim 1 which reads as follows:

1. An organic thin film transistor comprising:

a gate electrode positioned on a layer of gate insulator material;

a source electrode and a drain electrode positioned in spaced apart relationship on a film of organic semiconductor material with uniaxially aligned molecules, the film of organic semiconductor material being positioned so that the uniaxially aligned molecules are aligned between the source and drain electrodes in a direction from the source to the drain electrodes, the layer of gate insulator material being operatively positioned adjacent to and in parallel with the film of organic semiconductor material; and

an orientation film positioned adjacent the film of organic semiconductor material so that molecular uniaxial alignment of the film of organic semiconductor material is

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achieved by the orientation film positioned adjacent the film of organic semiconductor material.

The references set forth below are relied upon by the examiner in the rejections before us:

Masi 15, 1978	4,106,951	Aug.
Akiyama et al. (Akiyama) ¹ 1995	5,468,519	Nov. 21,
Tsumura et al. (Tsumura) 19, 1996	5,500,537	Mar.
	(filed Jul. 30, 1993)	
Kishimoto et al. (Kishimoto) 27, 1991 (EP)	0 418 504	Mar.

Claims 1-24 stand rejected under the first paragraph of 35 U.S.C. § 112 as failing to comply with the written description requirement and/or with the enablement requirement of this paragraph.²

Claims 1-7, 9-18 and 20-23 stand rejected under 35 U.S.C.

¹ The Akiyama reference is relied upon by the examiner in support of his section 112, first paragraph, rejection.

² The examiner's basis for this rejection is unclear in that the statement of rejection reflects a written description issue whereas the discussion of the rejection by the examiner (e.g., in the "Response to Arguments" section of the answer) reflects an enablement issue. This lack of clarity is harmless in light of our disposition of the section 112, first paragraph, rejection.

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§ 102(e) as being anticipated by Tsumura.

Claims 1, 8, 14 and 19 stand rejected under 35 U.S.C. § 103 as being unpatentable over Tsumura in view of Masi.

Finally, claim 24 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Kishimoto.

We refer to the brief and to the answer for a thorough discussion of the respective positions advocated by the appellants and by the examiner concerning the above noted rejections.

OPINION

We will not sustain any of these rejections.

The section 112, first paragraph, rejection plainly cannot be sustained to the extent that it is based upon a failure to comply with the written description requirement of this paragraph. This is because the examiner has not even identified the here claimed subject matter which is thought to be offensive to the written description requirement. To the extent that the rejection is based upon a failure to comply with the enablement requirement, the rejection still cannot be sustained. In this regard, we emphasize that the examiner has failed to carry his initial burden of advancing acceptable

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reasoning inconsistent with enablement. In re Strahilevitz, 668 F.2d 1229, 1232, 212 USPQ 561, 563 (CCPA 1982). On the other hand, the appellants have set forth in their brief a number of reasons which support a conclusion that the subject specification disclosure would enable one with ordinary skill in the art to practice the here claimed invention.

In light of the foregoing, we cannot sustain the section 112, first paragraph, rejection of appealed claims 1-24.

Concerning the prior art rejections, it appears to be the examiner's position that each of the primary references to Tsumura and Kishimoto discloses a transistor comprising a film of organic semiconductor material which inherently possesses "uniaxially aligned molecules" as required by all of the appealed claims. However, these references do not disclose that the film of organic semiconductor material described therein possesses uniaxially aligned molecules nor do they disclose an orientation film of the type claimed and disclosed by the appellants which would necessarily produce a film of organic semiconductor material with uniaxially aligned molecules. Under these circumstances, it is clear that the examiner's inherency position is not supported by any evidence

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or scientific reasoning and thus cannot be regarded as reasonable. See Ex parte Skinner, 2 USPQ2d 1788, 1789 (Bd. Pat. App. & Int. 1986). This deficiency is fatal to each of the prior art rejections advanced by the examiner on this appeal.

As a consequence, we also will not sustain the section 102(e) rejection based on Tsumura, the section 103 rejection based on Tsumura in view of Masi or the section 102(b) rejection based on Kishimoto.

The decision of the examiner is reversed.

REVERSED

	Bradley R. Garris)	
	Administrative Patent Judge)	
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)	
)	
	Chung K. Pak)	BOARD OF
PATENT	Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
	Howard B. Blankenship)	

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Administrative Patent Judge)

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