

Date	February 25, 2015	Court	Intellectual Property High Court, Third Division
Case number	2014 (Gyo-Ke) 10027		
<p>– A case wherein, with respect to a patent granted for an invention (the "Invention") titled "light-emitting material for organic electroluminescent device, organic electroluminescent device using the same, and material for organic electroluminescent device," the court rescinded a JPO decision on the grounds that the JPO erred in identifying the cited invention and the difference between the Invention and the cited invention, and on making determinations on such difference.</p>			

Reference: Article 29, paragraphs (1) and (2) of the Patent Act

Number of related rights, etc.: Patent No. 4866885, Invalidation Trial No. 2013-800072

### Summary of Judgment

#### 1. Background

The defendant is a patentee of the patent mentioned above. The plaintiff filed a request for a trial for patent invalidation but the JPO rendered a trial decision (the "JPO Decision") to dismiss such request, and thus, the plaintiff filed an action seeking rescission of the JPO Decision.

The plaintiff alleged that the JPO erred in identifying the cited invention and the difference between the invention in question (the "Invention") and the cited invention, and in determining inventive steps.

#### 2. Court decision

The court determined to rescind the JPO Decision on the grounds that the JPO erred in identifying the cited invention and the difference between the Invention and the cited invention and, as a result, erred in determining whether or not the Invention could have been easily conceived of by a person ordinarily skilled in the art.

In the JPO Decision, with respect to the contents of the cited invention (Exhibit Ko No. 1 Invention), the JPO found that the statements in Claim 1 contained in Exhibit Ko No. 1, which reads "In the formula, [...] B is a 2-60C heterocyclic group, which is a 1-substituted alkenyl group or arylamino group, or a substituent or non-substituent 5-60C aryl group," mean that "B is a 2-60C heterocyclic group, which is a 1-substituted alkenyl group or arylamino group, or a substituent or non-substituent 5-60C aryl group, which is a 1-substituted alkenyl group or arylamino group." In other words, the JPO found that the part "1-substituted alkenyl group or arylamino group" also modifies the part "substituent or non-substituent 5-60C aryl group" and identified the difference between the Invention and the cited invention based on this finding.

However, the abovementioned identification of the cited invention is erroneous in

light of the wording used in Claim 1 and the statements, etc. in the description contained in Exhibit Ko No. 1. Instead, it is appropriate to construe that the part "a 1-substituted arkenyl group or arylamino group" does not modify the part "a substituent or non-substituent 5-60C aryl group."

In addition, based on the abovementioned construction, the Invention contains a part that is covered by Exhibit Ko No. 1 Invention. Thus, Difference 1 found between the Invention and Exhibit Ko No. 1 Invention in the JPO Decision is also erroneous, and no substantial difference can be found between the two inventions.

When an invention pertaining to a patent is covered by another invention stated in a prior publicly known document as a subordinate conception thereof, it should be construed that the first-mentioned invention is not patentable unless it is specifically disclosed in a prior publicly known document and produces a remarkable specific effect in comparison to the invention stated in a prior publicly known document, in other words, an effect that differs in quality from that produced by the invention stated in a prior publicly known document, or a remarkably superior effect despite having the same quality as that produced by such invention.

It remains unclear solely from the result of an experiment comparing working example 1 shown in Exhibit Ko No. 1 submitted by the defendant and working example 1 of the Invention as to whether or not the other working examples of the Invention produce a superior effect in comparison to the working examples shown in Exhibit Ko No. 1. Moreover, since the Invention covers a wide range, the five working examples stated in the description alone are insufficient to find that the Invention in whole produces the same effect as that shown in the working examples. Furthermore, there is no other sufficient evidence to find that the Invention produces a remarkable specific effect in comparison to the invention stated in Exhibit Ko No. 1.

Judgment rendered on February 25, 2015  
2014 (Gyo-Ke) 10027  
Case of Seeking Rescission of JPO Decision  
Date of conclusion of oral argument: February 9, 2015

### Judgment

Plaintiff: Hodogaya Chemical Co., Ltd.  
Defendant: Idemitsu Kosan Co., Ltd.

### Main Text

1. The Trial Decision made on Invalidation Trial No. 2013-800072 by the Japan Patent Office on December 17, 2013 shall be rescinded.
2. Defendant shall bear court costs.

### Facts and Reasons

#### I. Claims

Same gist as the main text.

#### II. Outline of The Case

1 Outline of procedures at the Japan Patent Office (facts that are undisputed by the parties or are found by the entire import of the oral argument)

Defendant is the patentee of Patent No. 4866885 (hereinafter, referred to as "Present Patent"; the number of claims: 14) titled "Light-emitting material for organic electroluminescent device, organic electroluminescent device using the same, and material for organic electroluminescent device," which was filed on August 21, 2008 (Patent Application No. 2008-212714, which is a new patent application based on a portion of Patent Application No. 2008-183142 filed on December 13, 2004 (the priority claimed from Patent Application No. 2003-423317 filed on December 19, 2003 in Japan)), and established and registered on November 18, 2011.

On April 24, 2013, Plaintiff filed a request for invalidating all of the claims of Present Patent to the Patent Office. Defendant filed a request for correction on Claim 2 of Present Patent on July 16, 2013 (hereinafter, referred to as "Present Correction").

The Patent Office examined the above requests as a case of Invalidation No. 2013-800072, and as a result, made a trial decision to "allow the correction as in the request and dismiss the request for the present trial" on December 17, 2013; and the transcript thereof was dispatched to Plaintiff on December 27, 2013.

On January 24, 2014, Plaintiff instituted the present action for seeking rescission of the above trial decision.

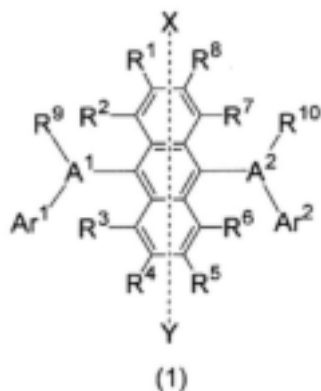
## 2 Description of the scope of the claims (Exhibit Ko 25)

The description of Claims 1 to 14 of Present Patent after Present Correction is as follows (Hereinafter, the invention described in Claim 1 is referred to as "Present Invention 1." In addition, Present Inventions 1 to 14 are referred to collectively as "Present Invention," and the description and drawings of Present Patent after Present Correction are referred to collectively as "Present Corrected Description.").

### [Claim 1]

A light-emitting material for an organic electroluminescent device comprising an asymmetric anthracene derivative represented by the following general formula (1):

[Formula 1]



wherein:

A<sup>1</sup> and A<sup>2</sup> each independently represent a condensed aromatic hydrocarbon ring group selected from a 1-naphthyl group, a 2-naphthyl group, a 1-phenanthryl group, a 2-phenanthryl group, a 3-phenanthryl group, a 4-phenanthryl group, a 9-phenanthryl group, a 3-methyl-2-naphthyl group, and a 4-methyl-1-naphthyl group;

Ar<sup>1</sup> and Ar<sup>2</sup> each independently represent an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50, or one of Ar<sup>1</sup> and Ar<sup>2</sup> represents a hydrogen atom and the other represents an aromatic hydrocarbon ring group having ring carbon atoms

of 6 to 50;

R<sup>1</sup> to R<sup>8</sup> each independently represent a hydrogen atom, an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50, an alkyl group having carbon atoms of 1 to 50 or a cycloalkyl group having carbon atoms of 3 to 50 (wherein when A<sup>1</sup> and/or A<sup>2</sup> represents a 1-naphthyl group or a 2-naphthyl group, R<sup>1</sup> to R<sup>8</sup> each independently represent a hydrogen atom or an alkyl group having carbon atoms of 1 to 50);

R<sup>9</sup> and R<sup>10</sup> each independently represent a hydrogen atom, an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50, an alkyl group having carbon atoms of 1 to 50, or a cycloalkyl group having carbon atoms of 3 to 50, and neither of R<sup>9</sup> and R<sup>10</sup> is an alkenyl group; and

Ar<sup>1</sup>, Ar<sup>2</sup>, R<sup>9</sup> and R<sup>10</sup>, are optionally a plural number,

except where, in the general formula (1), groups symmetrical with respect to the x-y axis on anthracene bind at 9th and 10th positions of the anthracene at the core.

[Claim 2]

The light-emitting material for an organic electroluminescent device according to Claim 1, wherein, in the general formula (1),

A<sup>1</sup> and A<sup>2</sup> each independently represent any of a 1-naphthyl group, a 2-naphthyl group, and a 9-phenanthryl group;

the aromatic hydrocarbon ring groups of Ar<sup>1</sup> and Ar<sup>2</sup> each independently represent any one of a phenyl group, a 1-naphthyl group, a 2-naphthyl group, a 1-anthryl group, a 2-anthryl group, a 9-anthryl group, a 1-phenanthryl group, a 2-phenanthryl group, a 3-phenanthryl group, a 4-phenanthryl group, a 9-phenanthryl group, a 1-pyrenyl group, a 2-pyrenyl group, a 4-pyrenyl group, a 2-biphenyl group, a 3-biphenyl group, a 4-biphenyl group, a p-terphenyl-4-yl group, a p-terphenyl-3-yl group, a p-terphenyl-2-yl group, an m-terphenyl-4-yl group, an m-terphenyl-3-yl group, an m-terphenyl-2-yl group, an o-tolyl group, an m-tolyl group, a p-tolyl group, a p-t-butylphenyl group, a p-(a 2-phenylpropyl)phenyl group, a 3-methyl-2-naphthyl group, a 4-methyl-1-naphthyl group, a 4-methyl-1-anthryl group, a 4'-methylbiphenyl group, and a 4''-t-butyl-p-terphenyl-4-yl group;

the aromatic hydrocarbon ring groups of R<sup>1</sup> to R<sup>10</sup> each independently represent any one of a phenyl group, a 1-naphthyl group, a 2-naphthyl group, a 1-anthryl group, a 2-anthryl group, a 9-anthryl group, a 1-phenanthryl group, a 2-phenanthryl group, a 3-phenanthryl group, a 4-phenanthryl group, a 9-phenanthryl group, a 1-pyrenyl group, a 2-pyrenyl group, a 4-pyrenyl group, a 2-biphenyl group, a 3-biphenyl group, a 4-biphenyl group, a p-terphenyl-4-yl group, a p-terphenyl-3-yl group, a p-terphenyl-2-

yl group, an m-terphenyl-4-yl group, an m-terphenyl-3-yl group, an m-terphenyl-2-yl group, an o-tolyl group, an m-tolyl group, a p-tolyl group, a p-t-butylphenyl group, a p-(2-phenylpropyl)phenyl group, a 3-methyl-2-naphthyl group, a 4-methyl-1-naphthyl group, a 4-methyl-1-anthryl group, a 4'-methylbiphenyl group, and a 4''-t-butyl-p-terphenyl-4-yl group;

the alkyl groups of R<sup>1</sup> to R<sup>10</sup> each independently represent any one of a methyl group, an ethyl group, a propyl group, an isopropyl group, an n-butyl group, an s-butyl group, an isobutyl group, a t-butyl group, an n-pentyl group, an n-hexyl group, an n-heptyl group, and an n-octyl group; and

the cycloalkyl groups of R<sup>1</sup> to R<sup>10</sup> each independently represent any one of a cyclopropyl group, a cyclobutyl group, a cyclopentyl group, a cyclohexyl group, a 4-methylcyclohexyl group, a 1-adamantyl group, a 2-adamantyl group, a 1-norbornyl group and a 2-norbornyl group.

[Claim 3]

The light-emitting material for an organic electroluminescent device according to Claim 1, wherein, in the general formula (1),

Ar<sup>1</sup> and Ar<sup>2</sup> each independently represents any one of a phenyl group, a 1-naphthyl group, a 2-naphthyl group, a 1-phenanthryl group, a 2-phenanthryl group, a 3-phenanthryl group, a 4-phenanthryl group, a 9-phenanthryl group, a 2-biphenyl group, a 3-biphenyl group, a 4-biphenyl group, a p-terphenyl-4-yl group, a p-terphenyl-3-yl group, a p-terphenyl-2-yl group, an m-terphenyl-4-yl group, an m-terphenyl-3-yl group, and an m-terphenyl-2-yl group; or one of Ar<sup>1</sup> and Ar<sup>2</sup> represents a hydrogen atom and the other represents any one of a phenyl group, a 1-naphthyl group, a 2-naphthyl group, a 1-phenanthryl group, a 2-phenanthryl group, a 3-phenanthryl group, a 4-phenanthryl group, a 9-phenanthryl group, a 2-biphenyl group, a 3-biphenyl group, a 4-biphenyl group, a p-terphenyl-4-yl group, a p-terphenyl-3-yl group, a p-terphenyl-2-yl group, an m-terphenyl-4-yl group, an m-terphenyl-3-yl group, and an m-terphenyl-2-yl group.

[Claim 4]

The light-emitting material for an organic electroluminescent device according to Claim 1, wherein, in the general formula (1), Ar<sup>1</sup> and Ar<sup>2</sup> each independently represent any one of a phenyl group, a 1-naphthyl group, a 2-naphthyl group, and a 9-phenanthryl group; or one of Ar<sup>1</sup> and Ar<sup>2</sup> represents a hydrogen atom and the other represents any one of a phenyl group, a 1-naphthyl group, a 2-naphthyl group, and a 9-

phenanthryl group.

[Claim 5]

The light-emitting material for an organic electroluminescent device according to Claim 1, wherein the asymmetric anthracene derivative comprises a naphthalene-1-yl group having a substituent at the 4th position thereof and/or a condensed aromatic hydrocarbon ring group having ring carbon atoms of 12 to 20.

[Claim 6]

The light-emitting material for an organic electroluminescent device according to Claim 1, wherein R<sup>9</sup> and R<sup>10</sup> each represent a hydrogen atom.

[Claim 7]

The light-emitting material for an organic electroluminescent device according to Claim 1, wherein R<sup>1</sup> to R<sup>8</sup> each represent a hydrogen atom, a phenyl group, a 1-naphthyl group, or a 2-naphthyl group.

[Claim 8]

The light-emitting material for an organic electroluminescent device according to Claim 1, wherein R<sup>1</sup> to R<sup>8</sup> each represent a hydrogen atom.

[Claim 9]

The light-emitting material for an organic electroluminescent device according to Claim 1, wherein at least one of A<sup>1</sup> and A<sup>2</sup> represents a 4-methyl-1-naphthyl group.

[Claim 10]

An organic electroluminescent device, in which an organic thin film layer composed of one or more layers including at least a light-emitting layer is interposed between a cathode and an anode, wherein a light-emitting zone comprises the light-emitting material for the organic electroluminescent device according to Claim 1 singly or as a component of a mixture thereof.

[Claim 11]

The organic electroluminescent device according to Claim 10, wherein the light-emitting layer comprises the light-emitting material for the organic electroluminescent device singly or as a component of a mixture thereof.

[Claim 12]

The organic electroluminescent device according to Claim 10, wherein the organic thin film layer comprises the light-emitting material for the organic electroluminescent device as a host material.

[Claim 13]

The organic electroluminescent device according to any one of Claims 10 to 12, wherein the light-emitting layer additionally comprises an arylamine compound.

[Claim 14]

The organic electroluminescent device according to any one of Claims 10 to 12, wherein the light-emitting layer additionally comprises a styrylamine compound.

### 3 Reasons given in Trial Decision

(1) Reasons given in the Trial Decision are as in the separate sheet of a copy of the Trial Decision. The gist thereof is as follows.

A(a) Present Inventions 1 to 9 are not such inventions as could have been easily conceived of by a person ordinarily skilled in the art based on the invention on a light-emitting material for an organic EL device (hereinafter, referred to as "Exhibit Ko 1 Invention 1") described in International Publication No. WO 03/087023 (Exhibit Ko 1, which is an application of Defendant; hereinafter, referred to as "Exhibit Ko1"), and the findings described in Publication of Unexamined Patent Application No. 2000-182776 (Exhibit Ko 2; hereinafter, referred to as "Exhibit Ko 2") and the documents (Exhibits Ko 3 to 13) described below in C.

(b) Present Inventions 10 to 14 are not such inventions as could have been easily conceived of by a person ordinarily skilled in the art based on the invention on an organic EL device (hereinafter, referred to as "Exhibit Ko 1 Invention 2"; and referred to as "Exhibit Ko 1 Invention" together with Exhibit Ko 1 Invention 1) described in Exhibit Ko 1, and the findings described in Exhibit Ko 2 and the documents (Exhibits Ko 3 to 13) described below in C.

B(a) Present Inventions 1 to 9 are not such inventions as could have been easily conceived of by a person ordinarily skilled in the art based on the invention on a hole



transport material for an organic multilayer EL device (hereinafter, referred to as "Exhibit Ko 2 Invention 1") and the findings described in Exhibit Ko 1 and the documents (Exhibits Ko 3 to 13) described below in C.

(b) Present Inventions 10 to 14 are not such inventions as could have been easily conceived of by a person ordinarily skilled in the art based on the invention on an organic multilayer EL device (hereinafter, referred to "Exhibit Ko 2 Invention 2"; and referred to as "Exhibit Ko 2 Invention 2" together with Exhibit Ko 2 Invention 1) described in Exhibit Ko 2, and the findings described in Exhibit Ko 1 and the documents (Exhibits Ko 3 to 13) described below in C.

C Documents cited in Trial Decision are as follows.

- (a) Publication of Unexamined Patent Application No. 2001-97897 (Exhibit Ko 3)
- (b) Patent No. 3148176 (Exhibit Ko 4)
- (c) International Publication No. WO 01/21729 (Exhibit Ko 5)
- (d) Publication of Unexamined Patent Application No. 1999-167991 (Exhibit Ko 6)
- (e) Publication of Unexamined Patent Application No. 1999-307255 (Exhibit Ko 7)
- (f) R&D Review of Toyota CRDL, Vol. 36, No. 3 (2001, 9), page 57 (Exhibit Ko 8)
- (g) R&D Review of Toyota Central R&D Labs., Inc., Vol. 33, No. 2 (1998, 6), pages 3 to 22 (Exhibit Ko 9)
- (h) Publication of Unexamined Patent Application No. 2001-284050 (Exhibit Ko 10)
- (i) Specification of US Patent No. 5935721 (Exhibit Ko 11)
- (j) Publication of Unexamined Patent Application No. 6-1973 (Exhibit Ko 12)
- (k) "Organic EL Material and Display" supervised by Junji Kido, February 28, 2001, published by CMC Publishing Co., Ltd., pages 3 to 26 (Chapter 1) and pages 82 to 102 (Chapter 6) (Exhibit Ko 13)

(2) Trial Decision has found: the contents of Inventions 1 and 2 of Exhibit Ko 1; the common feature and difference between Present Invention 1 and Invention 1 of Exhibit Ko 1; the common feature and difference between Present Invention 10 and Invention 2 of Exhibit Ko 1; and the contents of Inventions 1 and 2 of Exhibit Ko 2; the common feature and difference between Present Invention 1 and Invention 1 of Exhibit Ko 2; the common feature and difference between Present Invention 10 and Invention 2 of Exhibit Ko 2, as described below.

A(a) Contents of Invention 1 of Exhibit Ko 1

"A light-emitting material for an organic EL device represented by the following general formula (A)



wherein Ar is an unsubstituted anthracendiyl group; B represents a heterocyclic group having 2 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group, or a substituted or unsubstituted aryl group having 5 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group; and A represents an unsubstituted or aryl-substituted naphthyl group."

(b) Contents of Invention 2 of Exhibit Ko 1

"An organic EL device comprising a light-emitting layer composed of: the light-emitting material for an organic EL device of Invention 1 of Exhibit Ko 1, or a mixture of the light-emitting material and an arylamine compound or a styrylamine compound, wherein the light-emitting layer is sandwiched between a cathode and an anode."

B Common features and differences between Present Invention 1 and Invention 1 of Exhibit Ko 1

(a) Common features

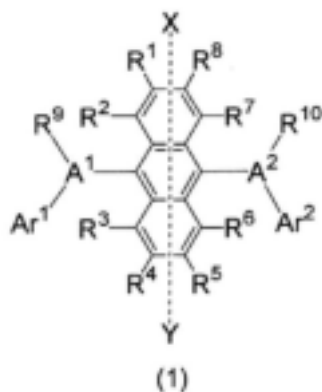
"A light-emitting material for an organic EL device comprising a compound having an anthracene skeleton"

(b) Difference 1

Regarding "a compound having an anthracene skeleton" for "a light-emitting material for an organic EL device," Present Invention 1 describes

"an asymmetric anthracene derivative represented by the following general formula (1):

[Formula 1]



wherein:

A<sup>1</sup> and A<sup>2</sup> each independently represent a condensed aromatic hydrocarbon ring group selected from a 1-naphthyl group, a 2-naphthyl group, a 1-phenanthryl group, a 2-phenanthryl group, a 3-phenanthryl group, a 4-phenanthryl group, a 9-phenanthryl group, a 3-methyl-2-naphthyl group, and a 4-methyl-1-naphthyl group;

Ar<sup>1</sup> and Ar<sup>2</sup> each independently represent an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50, or one of Ar<sup>1</sup> and Ar<sup>2</sup> represents a hydrogen atom and the other represents an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50;

R<sup>1</sup> to R<sup>8</sup> each independently represent a hydrogen atom, an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50, an alkyl group having carbon atoms of 1 to 50 or a cycloalkyl group having carbon atoms of 3 to 50 (wherein when A<sup>1</sup> and/or A<sup>2</sup> represent a 1-naphthyl group or a 2-naphthyl group, R<sup>1</sup> to R<sup>8</sup> each independently represent a hydrogen atom or an alkyl group having carbon atoms of 1 to 50);

R<sup>9</sup> and R<sup>10</sup> each independently represent a hydrogen atom, an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50, an alkyl group having carbon atoms of 1 to 50 or a cycloalkyl group having carbon atoms of 3 to 50, and neither of R<sup>9</sup> and R<sup>10</sup> is an alkenyl group; and

Ar<sup>1</sup>, Ar<sup>2</sup>, R<sup>9</sup>, and R<sup>10</sup> are optionally a plural number,

except where, in the general formula (1), groups symmetrical with respect to the x-y axis on anthracene bind at 9th and 10th positions of the anthracene at the core"

while Invention 1 of Exhibit Ko 1 describes

"the following general formula (A)



wherein Ar is an unsubstituted anthracendiyl group; B represents a heterocyclic group having 2 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group, or a substituted or unsubstituted aryl group having 5 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group; and A represents an unsubstituted or aryl-substituted naphthyl group."

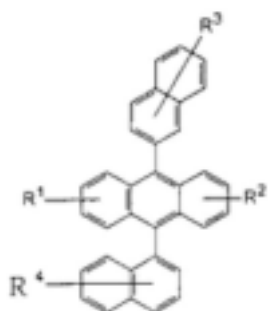
C Common feature and difference between Present Invention 10 and Invention 2 of Exhibit Ko 1

Regarding "a light-emitting material for an organic EL device," Present Invention 10 specifies the material "described in Claim 1," while Invention 2 of Exhibit Ko 1 specifies the material of "Invention 1 of Exhibit Ko 1"; and in this point, they differ

from each other (Difference 1'), but the other points are the same.

D(a) Contents of Invention 1 of Exhibit Ko 2

"A hole transport material for an organic multilayer EL device comprising an asymmetric anthracene-based organic compound,



wherein substituents R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, and R<sup>4</sup> are each individually hydrogen, an alkyl group having 1 to 24 carbon atoms, an aryl group or substituted aryl group having 5 to 20 carbon atoms, a heteroaryl group or substituted heteroaryl group having 5 to 24 carbon atoms, fluorine, chlorine, bromine, or a cyano group."

(b) Contents of Invention 2 of Exhibit Ko 2

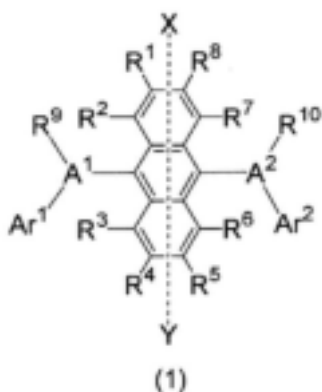
"An organic multilayer EL device wherein a hole transport layer comprising the hole transport material for an organic multilayer EL device of Invention 1 of Exhibit Ko 2 is sandwiched between an anode and a cathode"

E Common features and differences between Present Invention 1 and Invention 1 of Exhibit Ko 2

(a) Common features

"A material for an organic electroluminescent device comprising an asymmetric anthracene derivative represented by the following general formula (1):

[Formula 1]



wherein:

$A^1$  and  $A^2$  each independently represent a condensed aromatic hydrocarbon ring group selected from a 1-naphthyl group, a 2-naphthyl group, a 1-phenanthryl group, a 2-phenanthryl group, a 3-phenanthryl group, a 4-phenanthryl group, a 9-phenanthryl group, a 3-methyl-2-naphthyl group, and a 4-methyl-1-naphthyl group;

$Ar^1$  and  $Ar^2$  each independently represent an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50, or one of  $Ar^1$  and  $Ar^2$  represents a hydrogen atom and the other represents an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50;

$R^1$  to  $R^8$  each independently represent a hydrogen atom, an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50, an alkyl group having carbon atoms of 1 to 50, or a cycloalkyl group having carbon atoms of 3 to 50 (wherein when  $A^1$  and/or  $A^2$  represent 1-naphthyl group or 2-naphthyl group,  $R^1$  to  $R^8$  each independently represent a hydrogen atom or an alkyl group having carbon atoms of 1 to 50);

$R^9$  and  $R^{10}$  each independently represent a hydrogen atom, an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50, an alkyl group having carbon atoms of 1 to 50 or a cycloalkyl group having carbon atoms of 3 to 50, and neither of  $R^9$  and  $R^{10}$  is an alkenyl group; and

$Ar^1$ ,  $Ar^2$ ,  $R^9$ , and  $R^{10}$  are optionally a plural number,

except where, in the general formula (1), groups symmetrical with respect to the x-y axis on anthracene bind at the 9th and 10th positions of the anthracene at the core."

(b) Difference 2

Present Invention 1 specifies "a light-emitting material for an organic electroluminescent device" while Invention 1 of Exhibit Ko 2 specifies "a hole transport material for an organic multilayer EL device."

F Common features and differences between Present Invention 10 and Invention 2 of Exhibit Ko 2

Regarding "a material for an organic EL device," Present Invention 10 specifies "a light-emitting zone comprises the light-emitting material for the organic electroluminescent device according to Claim 1 singly or as a component of a mixture thereof," while Invention 2 of Exhibit Ko 2 specifies "a hole transport layer comprising the hole transport material for an organic multilayer EL device of Invention 1 of Exhibit Ko 2"; and in this point, they differ from each other (Difference 2'), but the other points are the same.

(omitted)

V Determination of the court

The court has determined that Reason for Invalidation 1 alleged by Plaintiff is grounded, and thus, Trial Decision has illegality and should be invalidated even without making a determination on other points. Reasons are as follows.

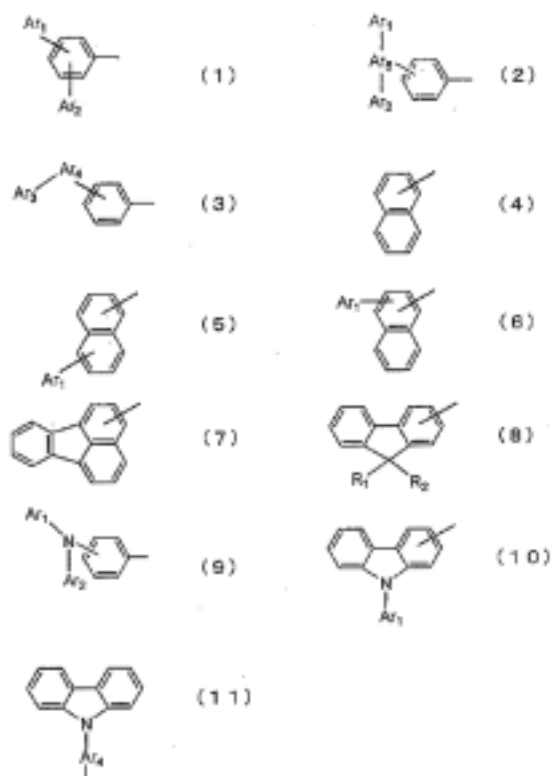
1 Regarding the finding of Invention 1 of Exhibit Ko 1 and the finding of Difference (1), Exhibit Ko 1 has the following descriptions (Exhibit Ko 1; added page numbers are those described at the bottom of Exhibit Ko 1).

A "Claims

1. A novel aromatic compound represented by the following general formula (A),



wherein Ar represents a substituted or unsubstituted anthracendiyl group; B represents a heterocyclic group having 2 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group, or a substituted or unsubstituted aryl group having 5 to 60 carbon atoms; A represents a group selected from groups represented by the following general formulae (1) to (11), which may be substituted with a substituted or unsubstituted alkyl group having 1 to 30 carbon atoms or a substituted or unsubstituted phenyl group, wherein A is not a phenyl group substituted with an arylamino group when B is substituted with an arylamino group,



wherein Ar<sub>1</sub> to Ar<sub>3</sub> each independently represent a substituted or unsubstituted aryl group having 6 to 30 carbon atoms, Ar<sub>4</sub> represents a substituted or unsubstituted arylene group having 6 to 30 carbon atoms, Ar<sub>5</sub> represents a substituted or unsubstituted trivalent aromatic residue group having 6 to 30 carbon atoms, R<sub>1</sub> and R<sub>2</sub> each independently represent a hydrogen atom, a halogen atom, a hydroxyl group, a substituted or unsubstituted amino group, a nitro group, a cyano group, a substituted or unsubstituted alkyl group having 1 to 30 carbon atoms, a substituted or unsubstituted alkenyl group having 2 to 40 carbon atoms, a substituted or unsubstituted cycloalkyl group having 5 to 40 carbon atoms, a substituted or unsubstituted alkoxy group having 1 to 30 carbon atoms, a substituted or unsubstituted aromatic hydrocarbon group having 5 to 40 carbon atoms, a substituted or unsubstituted aromatic heterocyclic group having 2 to 40 carbon atoms, a substituted or unsubstituted aralkyl group having 7 to 40 carbon atoms, a substituted or unsubstituted aryloxy group having 6 to 40 carbon atoms, a substituted or unsubstituted alkoxy carbonyl group having 2 to 30 carbon atoms, a substituted or unsubstituted silyl group having 3 to 40 carbon atoms or a carboxyl group, Ar<sub>1</sub>, and Ar<sub>2</sub>; and R<sub>1</sub> and R<sub>2</sub> may be independently and respectively bonded to each other to form a cyclic structure.

2. (A) represents: a heterocyclic group which has 2 to 60 carbon atoms and is mono-substituted with an alkenyl group or an arylamino group; or an aryl group which has 5 to 60 carbon atoms and is mono-substituted with an alkenyl group or an arylamino group." (page 59, line 1 to page 61, line 13)

"5. The novel aromatic compound according to any one of Claims 1 to 4, which is a material for organic electroluminescence devices." (page 63, lines 16 to 17)

B "heretofore known anthracene derivatives form crystals in many cases to cause fracture of the thin film, and improvement has been desired. For example, a dinaphthylanthracene compound is disclosed in the specification of U.S. Patent No. 0593571. However, since this compound has a symmetric molecular structure in the horizontal and vertical directions, the molecules are easily arranged to form crystals during storage at high temperatures and driving at high temperatures. Publication of Unexamined Patent Application No. 2000-273056 discloses an allylanthracene compound asymmetric in the horizontal direction, but one of the groups serving as substituents to the anthracendiyl group is a simple group such as phenyl group and biphenyl group, and the crystallization cannot be prevented. ... As the result of intensive studies to overcome the above problems, the present inventors have found that the above problems could be overcome by using a compound which has a high glass transition temperature and an asymmetric molecular structure as the material for the organic thin film layer of an organic EL device, and completed the present invention." (page 2, line 10 to page 3, line 1)

"B represents: a heterocyclic group having 2 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group, or a substituted or unsubstituted aryl group having 5 to 60 carbon atoms; preferably, a heterocyclic group which has 2 to 60 carbon atoms and is mono-substituted with an alkenyl group or an arylamino group, or an aryl group which has 5 to 60 carbon atoms and is mono-substituted with an alkenyl group or an arylamino group." (page 7, line 24, to page 8, line 3)

"Examples of the alkenyl group as the substituent in B include ... .

Examples of the arylamino group as the substituent in B include ... .

Examples of the substituted or unsubstituted heterocyclic group of B include ... , and the above group includes the above substituents and has 2 to 60 carbon atoms.

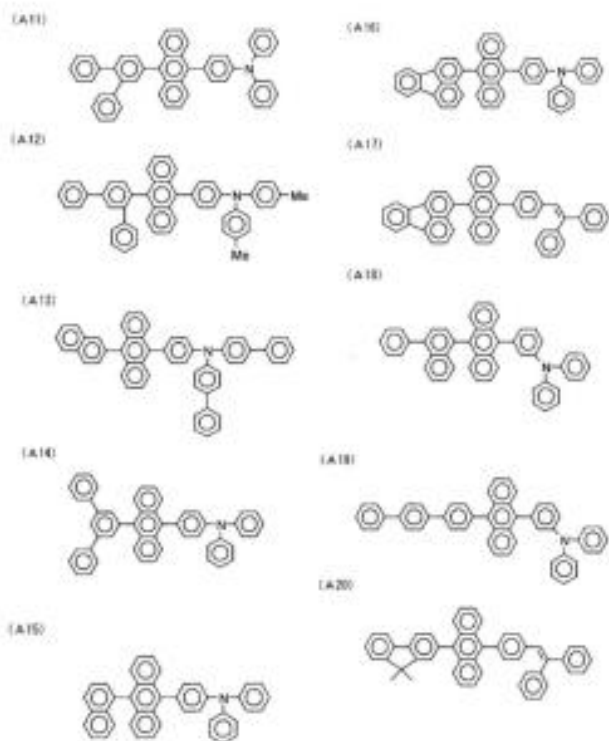
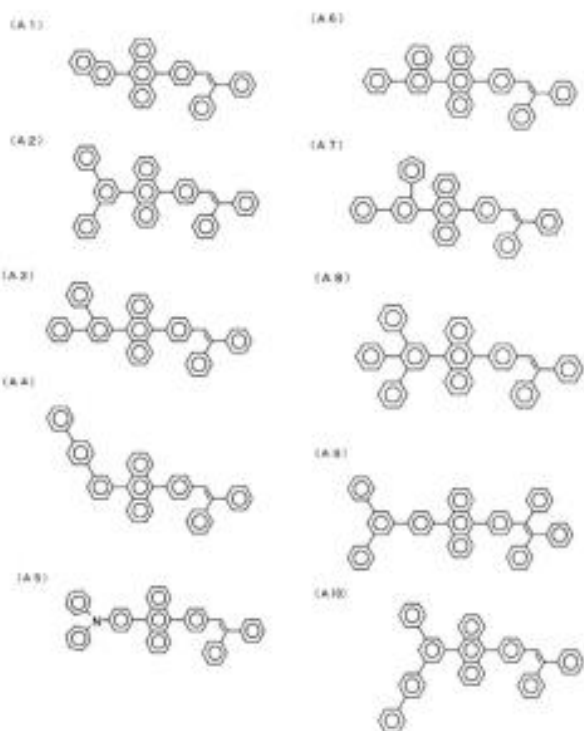
Examples of the aryl group of B include ... , and the above group includes the above substituents and has 5 to 60 carbon atoms." (page 8, line 4 to page 11, line 8)

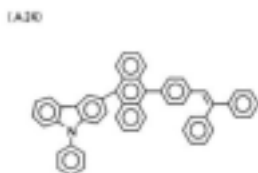
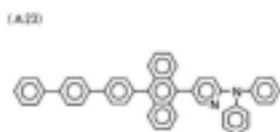
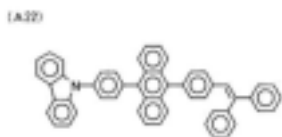
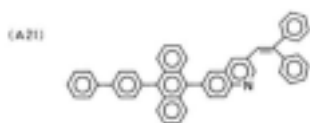


"Examples of the novel aromatic compound represented by general formula (A) are shown in the following, but are not limited to the compounds shown as these exemplary compounds.

( A 1 )

---

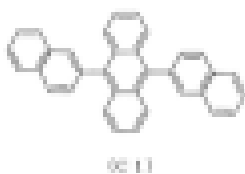




" (page 30, line 25 to page 33)

"Comparative Example 1

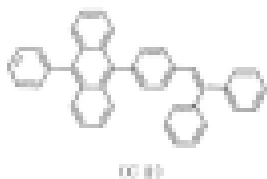
... Compound (C1) shown in the following ... was used in place of Compound (A1) used in Example 1 ...



...

Comparative Example 2

... Compound (C2) shown in the following ... was used in place of Compound (A1) used in Example 1 ...



...

Comparative Example 3

... Compound (C3) shown in the following ... was used in place of Compound (A1) used in Example 1 ...



Table 1

	Compound in light-emitting layer	Voltage (V)	Luminance of emitted light (cd/m <sup>2</sup> )	Efficiency of light emission (cd/A)	Color of emitted light	Tg of compound (°C)	Storage test at high temp.
Example 1	(A1)	6.0	176	2.2	blue	108	good
Example 2	(A2)	6.0	200	2.3	blue	120	good
Example 3	(A3)	6.0	161	3.1	blue	122	good
Example 4	(A4)	6.0	110	2.3	blue	115	good
Example 5	(A5)	6.0	780	2.0	blue	114	good
Example 6	(A6)	6.0	180	2.8	bluish green	112	good
Example 7	(A10)	6.0	250	2.9	blue	128	good
Example 8	(A20)	6.0	180	3.1	blue	124	good
Example 9	(B1)	6.0	260	2.2	blue	156	good
Example 10	(B2)	6.0	313	3.1	blue	152	good
Comparative Example 1	(C1)	6.0	120	2.1	bluish green	ND	crystallized
Comparative Example 2	(C2)	6.0	125	2.1	blue	95	crystallized
Comparative Example 3	(C3)	6.0	153	2.5	blue	109	crystallized

... As shown in Table 1, in Comparative Example 1, which used Compound (C1) having good symmetry, defects appeared on the light-emitting surface due to crystallization, and the emitted light was bluish green and the purity of the blue color was not excellent. In Comparative Examples 2 and 3, Compounds (C2) and (C3) had an asymmetric molecular structure in the horizontal direction, but crystallization took place and this is considered to occur due to a low glass transition temperatures. Since the compounds of the present invention were asymmetric and had relatively high glass

transition temperatures, the results of the storage test at a high temperature were excellent." (page 54, line 14 to page 56, line 9)

(2) Regarding the findings of Trial Decision

A

(a) Trial Decision has determined that it is natural to understand that the invention-specifying matter "B represents a heterocyclic group having 2 to 60 carbon atoms, or a substituted or unsubstituted aryl group having 5 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group" in Claim 1 of Exhibit Ko 1 is that "B represents a heterocyclic group having 2 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group, or a substituted or unsubstituted aryl group having 5 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group."

(b) However, in the Japanese structure of the invention-specifying matter of the above (a), the part "a heterocyclic group having 2 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group" and the part "a substituted or unsubstituted aryl group having 5 to 60 carbon atoms" are placed after the part "which is mono-substituted with an alkenyl group or an arylamino group" without separation by a particular comma, and the two portions are parallelly arranged with the word "or." Thus, it is natural to construe that the part "which is mono-substituted with an alkenyl group or an arylamino group" does not modify the part "a substituted or unsubstituted aryl group having 5 to 60 carbon atoms."

This is supported due to a comparison of: the description of Claim 2 "B in general formula (A) represents: a heterocyclic group which has 2 to 60 carbon atoms and is mono-substituted with an alkenyl group or an arylamino group; or an aryl group which has 5 to 60 carbon atoms and is mono-substituted with an alkenyl group or an arylamino group," which is dependent from Claim 1 of Exhibit Ko 1, is a subordinate conception and is understood as limiting the scope of Claim 1; and

the contrastive description, in which the part "a heterocyclic group which has 2 to 60 carbon atoms and is mono-substituted with an alkenyl group or an arylamino group" and the part "a substituted or unsubstituted aryl group which has 5 to 60 carbon atoms and is mono-substituted with an alkenyl group or an arylamino group" are described parallelly with the word "or," the part "which is mono-substituted with an alkenyl group or an arylamino group" is repeated before and after the term "or" and thereby, it is clear that the portion "which is mono-substituted with an alkenyl group or an

arylamino group" modifies the part "aryl group which has 5 to 60 carbon atoms."

(c) Further, if the above should be understood as "a substituted or unsubstituted aryl group which has 5 to 60 carbon atoms and is mono-substituted with an alkenyl group or an arylamino group" as found in the Trial Decision, it is construed that there exist the part "is mono-substituted with an alkenyl group or an arylamino group" and the part "unsubstituted," and inconsistency arises. If it is construed as "is mono-substituted with an alkenyl group or an arylamino group, and is (further) substituted or (the other) is unsubstituted" without the inconsistency,

literally, there is no other way to construe that: only the invention-specifying matter "mono-substituted with an alkenyl group or an arylamino group" cannot restrict the other portion of the aryl group as being substituted or unsubstituted; and thus, for restricting it, the invention-specifying matter is added. If so, it is unnatural because the invention-specifying matter having the same content "substituted or unsubstituted" is repeatedly added. In fact, regarding the part "a heterocyclic group having 2 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group" in Claim 1 of Exhibit Ko 1, the phrase "substituted or unsubstituted" is not added to "the heterocyclic group." However, the part describing examples of the heterocyclic group in the description of Exhibit Ko 1 (page 8, line 16 and subsequent portion) describes "Examples of the substituted or unsubstituted heterocyclic group of B include ... ." No phrase is added to the heterocyclic group of Claim 1, and there is a premise that there is no limitation on being substituted or unsubstituted.

(d) In view of the above, it is understood that the above invention-specifying matter of Claim 1 in Exhibit Ko 1 is found as containing both "a heterocyclic group having 2 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group" and "a substituted or unsubstituted aryl group having 5 to 60 carbon atoms" from the description thereof.

(e) In addition, as in the above (1) B, the description of Exhibit Ko 1 states "B represents: a heterocyclic group having 2 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group, or a substituted or unsubstituted aryl group having 5 to 60 carbon atoms; preferably, a heterocyclic group which has 2 to 60 carbon atoms and is mono-substituted with an alkenyl group or an arylamino group, or an aryl group which has 5 to 60 carbon atoms and is mono-substituted with an alkenyl group or an arylamino group." (page 7, line 24, to page 8,

line 3), which is in line with the construction of the above (b) to (d).

B Then, in light of the fact that the description of Exhibit Ko 1 describes six synthesis examples of anthracene derivatives of Claim 1, various anthracene derivatives having a considerably complicated substituent as of the priority date of Present Patent were synthesized (Exhibits Ko 2 to 5, 10 and 11), it is found that all of the anthracene derivatives covered by Claim 1 of Exhibit Ko 1 could have been synthesized by a person ordinarily skilled in the art as of the priority date of Present Patent.

Further, Claim 5 of Exhibit Ko 1 states that the novel aromatic compound of Claim 1 is used for organic electroluminescence devices, and furthermore, the above compound is used for a light-emitting layer in examples thereof. It is thus understood that the novel aromatic compounds (anthracene derivatives) of Claim 1 are used as a light-emitting material for an organic electroluminescent device, although they are in varying degrees in terms of the efficiency of light emission, the luminance, the lifetime, the heat resistance, the thin film forming property, and other characteristics.

C In view of the above, the invention found from Exhibit Ko 1, which is to be compared with Present Invention 1, is as follows (hereinafter, referred to as Invention 1 of Exhibit Ko 1").

"A light-emitting material for organic electroluminescent device represented by the following general formula (A),



wherein Ar represents a substituted or unsubstituted anthracendiyl group; B represents a heterocyclic group having 2 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group, or a substituted or unsubstituted aryl group having 5 to 60 carbon atoms; A represents a group selected from groups represented by the following general formulae (1) to (11), which may be substituted with a substituted or unsubstituted alkyl group having 1 to 30 carbon atoms or a substituted or unsubstituted phenyl group, wherein A is not a phenyl group substituted with an arylamino group when B is substituted with an arylamino group,

(Note for the judgment: the formulas (1) to (11) are as described in the above (1) A) wherein Ar<sub>1</sub> to Ar<sub>3</sub> each independently represent a substituted or unsubstituted aryl group having 6 to 30 carbon atoms, Ar<sub>4</sub> represents a substituted or unsubstituted arylene group having 6 to 30 carbon atoms, Ar<sub>5</sub> represents a substituted or

unsubstituted trivalent aromatic residue group having 6 to 30 carbon atoms, R<sub>1</sub> and R<sub>2</sub> each independently represent a hydrogen atom, a halogen atom, hydroxyl group, a substituted or unsubstituted amino group, a nitro group, a cyano group, a substituted or unsubstituted alkyl group having 1 to 30 carbon atoms, a substituted or unsubstituted alkenyl group having 2 to 40 carbon atoms, a substituted or unsubstituted cycloalkyl group having 5 to 40 carbon atoms, a substituted or unsubstituted alkoxy group having 1 to 30 carbon atoms, a substituted or unsubstituted aromatic hydrocarbon group having 5 to 40 carbon atoms, a substituted or unsubstituted aromatic heterocyclic group having 2 to 40 carbon atoms, a substituted or unsubstituted aralkyl group having 7 to 40 carbon atoms, a substituted or unsubstituted aryloxy group having 6 to 40 carbon atoms, a substituted or unsubstituted alkoxy carbonyl group having 2 to 30 carbon atoms, a substituted or unsubstituted silyl group having 3 to 40 carbon atoms or a carboxyl group, Ar<sub>1</sub> and Ar<sub>2</sub>; and R<sub>1</sub> and R<sub>2</sub> may be independently and respectively bonded to each other to form a cyclic structure."

D Then, a prima facie difference between Present Invention 1 and Invention 1 of Exhibit Ko 1' is as follows.

"Regarding A<sup>2</sup>, Ar<sup>2</sup> and R<sup>10</sup> of Present Invention 1, which correspond to the substituent B of Invention 1 of Exhibit Ko 1', A<sup>2</sup> is a condensed aromatic hydrocarbon ring group selected from a 1-naphthyl group, a 2-naphthyl group, a 1-phenanthryl group, a 2-phenanthryl group, a 3-phenanthryl group, a 4-phenanthryl group, a 9-phenanthryl group, a 3-methyl-2-naphthyl group, and a 4-methyl-1-naphthyl group, which is substituted with an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50, Ar<sup>2</sup> is an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50, and R<sup>10</sup> is a hydrogen atom, an aromatic hydrocarbon ring group having ring carbon atoms of 6 to 50, an alkyl group having carbon atoms of 1 to 50 or a cycloalkyl group having carbon atoms of 3 to 50 but is not an alkenyl group, except where groups symmetrical with respect to x-y axis on anthracene bind at the 9th and 10th positions of the anthracene at the core while the substituent B of Invention 1 of Exhibit Ko 1' is "substituted or unsubstituted aryl group having carbon atoms of 5 to 60."

E It is considered that the feature pertaining to the prima facie difference of Present Invention 1 described in the above D literally includes those covered by "substituted or unsubstituted aryl group having 5 to 60 carbon atoms" of Invention 1 of Exhibit Ko 1'.

Then, as of the priority date of Present Invention, anthracene derivatives were



widely used as a light-emitting material for an organic electroluminescent device, and it is found that, with the purpose of improving the efficiency of light emission, the luminance, the lifetime, the heat resistance, the thin film forming property, and other characteristics, a substituent to be used has been studied (Exhibits Ko 3 to 5, 10 and 11). Thus, it would have been sufficiently possible for a person ordinarily skilled in the art to select the substituent pertaining to Present Invention 1 from substituent options of Invention 1 of Exhibit Ko 1', and it is not considered that the substituent could not have been selected as the substituent of Invention 1 of Exhibit Ko 1'.

Considering the above, the feature pertaining to the prima facie difference of Present Invention 1 described in the above D includes those covered by "substituted or unsubstituted aryl group having 5 to 60 carbon atoms" of Invention 1 of Exhibit Ko 1', and it must be said that the prima facie difference is not a substantial difference.

In view of the above, Trial Decision is erroneous in identifying Invention 1 of Exhibit Ko 1, and the finding of Difference 1 is also erroneous since it is based on this erroneous identification of Invention 1 of Exhibit Ko 1.

### (3) Regarding Defendant's allegations

#### A Defendant alleges that

it is obvious that "the above substituents" in the description "Examples of the aryl group of B include ... , and the above group includes the above substituents and has 5 to 60 carbon atoms." (page 11, lines 3 to 8) in the description of Exhibit Ko 1 refer to alkenyl groups, etc., and thus, a person ordinarily skilled in the art can understand that the substituent B is an aryl group having 5 to 60 carbon atoms and including an alkenyl group, etc., that is mono-substitution of an alkenyl group, etc. is essential (the above IV. 1 (1) A).

However, the portion pointed out by Defendant is a description on the substituent B in the invention of Claim 1 of Exhibit Ko 1 in the portion "The Most Preferred Embodiment to Carry out The Invention" of the description of Exhibit Ko 1, and thus, it is not construed that the feature of the substituent B is limited by the above portion. Therefore, it is impossible to directly understand that mono-substitution of an alkenyl group, etc. in the substituent B is essential based on the description of the above portion as alleged by Defendant. Also, prior to the above portion, the beginning of "The Most Preferred Embodiment to Carry out The Invention" states "B represents: a heterocyclic group having 2 to 60 carbon atoms, which is mono-substituted with an alkenyl group or an arylamino group, or a substituted or unsubstituted aryl group having 5 to 60 carbon atoms; preferably, a heterocyclic group which has 2 to 60 carbon

atoms and is mono-substituted with an alkenyl group or an arylamino group, or an aryl group which has 5 to 60 carbon atoms and is mono-substituted with an alkenyl group or an arylamino group." (page 7, line 24, to page 8, line 3). In light of this statement, it is possible to understand that "the above substituents" are not limited to an alkenyl group or an arylamino group, but signify any group that "substitutes" for an aryl group.

Therefore, the above allegation of Defendant cannot be adopted.

Further, Defendant alleges that even when Claim 1 of Exhibit Ko 1 is construed as alleged by Defendant, Claim 2 keeps the consistency as being dependent from Claim 1 (the above IV. 1 (1) G).

However, in light of the explanations made in the above (2) A (b) to (d), the above allegation of Defendant cannot be adopted.

B Defendant alleges as follows.

(i) Specific examples and working examples in Invention 1 of Exhibit Ko 1 listed in the description of Exhibit Ko 1 are all an aryl group or a heterocyclic group mono-substituted by an alkenyl group, etc. (the above IV, 1(1) B).

(ii) The problem to be solved by Exhibit Ko 1 Invention is to prevent crystallization, and there is a description that this problem cannot be solved when one of anthracendiy-substituted groups is simply a phenyl group (an aryl group having 6 carbon atoms) or a biphenyl group (a phenyl group mono-substituted by a phenyl group). Thus, it should be construed that the substituent B does not include the above groups. Then, this construction is inconsistent with the construction of the above (2) C. Further, it is understood that the invention of Exhibit Ko 1 is an invention on a compound having an asymmetric molecular structure. However, when the construction of the above (2) C is adopted, Invention 1 of Exhibit Ko 1 includes compounds having a "symmetric" molecular structure and also includes symmetric dinaphthylanthracene of Comparative Example 1 (the above IV. 1(1) C).

(iii) Exhibit Ko 1 describes that the problem has been solved by a compound having a high glass transition temperature and an asymmetric molecular structure. Then, compounds of the working examples indicating a high glass transition temperature are common in that they include an alkenyl group (the above IV, 1 (1) D).

(iv) The prosecution history of Patent Application No. 2002-114400, which is a basic application claiming the priority for the PCT application of Exhibit Ko 1, indicates that a person ordinarily skilled in the art having learned Exhibit Ko 1 considers that the substituent B is limited to an aryl group or a heterocyclic group mono-substituted by an alkenyl group or an arylamino group described in Detailed Description of The

Invention and cannot understand that in other cases, the compounds can be produced and they have equal properties and functions (the above IV, 1 (1) E).

(v) A person ordinarily skilled in the art, assuming that it is common technical knowledge that an alkenyl group is a promising substituent that improves the purity of blue in a blue light-emitting material, the description of Exhibit Ko 1 based on the fact that Invention 1 of Exhibit Ko 1 has an object to provide a light-emitting material for an organic electroluminescent device, which emits blue light (the above IV, 1 (1) F).

Thus, Defendant alleges that, in view of the contents described in Exhibit Ko 1, it should be understood that it is essential that "aryl group" of the substituent B in Claim 1 is "mono-substituted by an alkenyl group or an arylamino group."

However, in identifying a cited invention from publicly known documents, what invention can be understood by a person ordinarily skilled in the art from the documents should be studied. However, it is common to describe a wide range of technical matters in original claims of an application described in a publication like Exhibit Ko 1 in the present case, and especially, in the case that substituents at several positions are alternatively described like Claim 1 of Exhibit Ko 1, various optional combinations are included (the same is applicable to, for example, other publications (Exhibits Ko 2 to 7, 10 and 12, and Exhibits Otsu 1 and 5) submitted in the present case). On the other hand, there are many cases wherein configurations specifically disclosed in descriptions are limited. In these cases, it is not understood that a person ordinarily skilled in the art construes that the technical matters disclosed in the documents are limited to those specifically disclosed therein.

Further, usually, among various compounds included in a wide scope of a claim, those specifically exemplified in a description are understood as being preferred. In fact, the description of Exhibit Ko 1 describes "preferably an aryl group which has 5 to 60 carbon atoms and is mono-substituted with an alkenyl group or an arylamino group" (page 8, lines 2 to 3). Moreover, if the construction alleged by Defendant is adopted, "aryl group" of the substituent B in Invention 1 of Exhibit Ko 1 has to be "mono-substituted with an alkenyl group or an arylamino group." However, all of those listed in the above (i), (iii), and (v) are those including an alkenyl group and not those including an arylamino group; and the points mentioned in the above (iii) and (v) directly lead to the understanding that if an alkenyl group is not included, the effect cannot be produced. In view of the above, it should be understood that the specific examples and the working examples of Exhibit Ko 1 indicate merely preferable examples, and the points mentioned in the above (i), (iii), and (v) does not allow the understanding that "aryl group" of the substituent B in Invention 1 of Exhibit Ko 1 has

to be "mono-substituted with an alkenyl group or an arylamino group."

Further, regarding the above (ii), it is certain that when the construction of the above (2) C is adopted, one of anthracendiyl-substituted groups include simply a phenyl group (an aryl group having 6 carbon atoms) or a biphenyl group (a phenyl group mono-substituted by a phenyl group), and symmetric dinaphthylanthracene of Comparative Example 1 is included. These are not consistent with the problem to be solved by the invention described in Exhibit Ko 1.

However, as of the priority date of Present Patent, anthracene derivatives having various substituents were already used widely as a light-emitting material for an organic electroluminescent device, and it is found that, with the purpose of improving the efficiency of light emission, the luminance, the lifetime, the heat resistance, the thin film forming property, and other characteristics, a substituent to be introduced has been studied (Exhibits Ko 3 to 5, 10, and 11). Considering the above, it is found understandable that all of the anthracene derivatives of Claim 1 of Exhibit Ko 1 can be plausibly used as a light-emitting material for an organic electroluminescent device, although they vary in degree in terms of the efficiency of light emission, the luminance, the lifetime, the heat resistance, the thin film forming property, and other characteristics. Then, it cannot be said that a person ordinarily skilled in the art understands that those except the above forms cannot solve the problem of Exhibit Ko 1 due to the same reason. The point mentioned in the above (ii) does not allow a person ordinarily skilled in the art to directly understand that "aryl group" of the substituent B in Invention 1 of Exhibit Ko 1 has to be limited to one "mono-substituted with an alkenyl group or an arylamino group."

Further, regarding the above (iv), it is obvious that the technical matters understood from the publicly known documents are not always limited to the configuration satisfying the patent requirement. This is also supported, for example, based on the fact that the inventions mentioned in the numbers of Article 29, paragraph (1) of the Patent Act are not limited to patented inventions. Therefore, if the description of a claim or a description lacks the support requirement or the enablement requirement and thus, may raise a reason for refusal, there is no reason to restrict the scope of the technical matters understood by a person ordinarily skilled in the art having read the publicly known documents as technical documents to the scope satisfying each of the above requirements. In addition, as explained above, it is common that a claim before being subjected to the examination describes a wide range of technical matters. Even if the anthracene derivatives covered by Claim 1 of Exhibit Ko 1 vary in

performance, they are found to be usable as a light-emitting material for an organic electroluminescent device. In light of the above, the point of the above (iv) is not a ground that a person ordinarily skilled in the art directly understands that the substituent B of Invention 1 of Exhibit Ko 1 is limited to "an aryl group or a heterocyclic group mono-substituted with an alkenyl group or an arylamino group."

In view of the foregoing, each of the above allegations of Defendant cannot be adopted.

## 2 Regarding the patentability

### (1) Regarding the prominent effect

A When an invention pertaining to a patent is covered by another invention stated in a prior publicly known document as a subordinate conception thereof, it should be construed that the first-mentioned invention is not patentable unless it is specifically disclosed in a prior publicly known document and produces a remarkable specific effect in comparison to the invention stated in the prior publicly known document; in other words, an effect that differs in quality from that produced by the invention stated in the prior publicly known document, or a remarkably superior effect despite having the same quality as that produced by such invention.

As explained in the above 1, Present Invention 1 includes those covered by Invention 1 of Exhibit Ko 1'.

B It is understood that Defendant has found that Example 1 (AN7) of Present Invention 1 exhibited, in the comparative test with Example 1 (A1) of Exhibit Ko 1, an improved performance of the light emission efficiency by 17.6% and an extended time of 90%-life by 87.9%, and thus, alleges that Present Invention 1 has a remarkable effect compared to Invention 1 of Exhibit Ko 1' (the above IV, 1 (2) B (c) a) and Present Invention 1 has a remarkable superior effect despite having the same quality in comparison with Invention 1 of Exhibit Ko 1'.

Then, the written statement (Exhibit Ko 21) prepared by Defendant, Electronic Materials Department, Electronic Materials Development Center A includes a statement that is in line with the above. Further, the above written statement describes that Example 5 in Present Corrected Description is excellent in current efficiency and 90%-life compared to Example 1 of Exhibit Ko 1.

Hereafter, whether Present Invention 1 has a remarkable and specific effect compared to Invention 1 of Exhibit Ko 1' will be studied.

Table 1

	Compound in light-emitting layer	Efficiency of light emission (cd/A)	Half-life (hours)
Example 1	AN7/D1	10.9	4,200
Example 2	AN8/D1	10.8	4,200
Reference Example 1	AN11/D1	11.0	5,800
Example 3	AN13/D1	10.8	3,700
Reference Example 2	AN44/D1	10.0	3,000
Example 4	AN6/D1	10.1	3,300
Example 5	AN12/D1	10.8	4,900
Reference Example 3	AN11/D1	10.3	3,700
Comparative Example 1	an-1/D1	9.0	2,200

C

(a) In accordance with Table 1 (Note of the judgment: Table 1 shown at the right hand) of [0097] of Present Corrected Description, it is found that Examples 1 and 5 are equal to or more excellent than other Examples 2, 3, and 4 in terms of the light emission efficiency and the half-life.

On the other hand, the light emission efficiency in each Example of Exhibit Ko 1 is shown in Table 1 in the above 1 (1) B (no description on the lifetime), and Examples 2 to 4, 6 to 8, and 10 exhibit a higher light emission efficiency than Example 1.

In view of the above, there is no other way to state that it is inapparent whether Examples described in Present Corrected Description have an excellent effect in terms of the light emission efficiency even when other Examples of Present Corrected Description (not described in the written statement (Exhibit Ko 21)) are compared to other Examples of Exhibit Ko 1 in terms of the operational effect; and rather, it is inferred that no difference in the light emission efficiency from examples described in the written statement is found. Further, it is inapparent whether the other Examples of Present Corrected Description not described in the written statement are excellent in lifetime compared to the other Examples of Exhibit Ko 1.

(b) Moreover, Examples 1 to 5 in Table 1 in [0097] of Present Corrected Description merely show the operational effect of a small portion of compounds, which are similar to one another, among a much broader range of compounds of Present Invention 1. That is, as in the above II, 2, in the general formula (1) of Present Invention 1, nine

options are present for A<sup>1</sup> while only two of them (2-naphthyl group and 9-phenanthryl) are used in Examples; nine options are present for A<sup>2</sup> while only two of them (1-naphthyl group and 2-naphthyl group) are used in Examples; a considerably large number of options are present for Ar<sup>1</sup> while only one of them (hydrogen atom) is used in Examples; a considerably large number of options are present for Ar<sup>2</sup> while only three of them (phenyl group, 2-naphthyl group and 2-biphenyl group) are used in Examples; and a considerably large number of options are present for R<sup>1</sup> to R<sup>10</sup> while only one of them (hydrogen atom) is used in Examples.

Meanwhile, it is common technical knowledge that during the usage as a light-emitting material, properties such as light emission efficiency or lifetime are varied depending on the combination of the above substituents (Exhibits Ko 3 to 5, 10 and 11).

Considering the above, it is impossible to recognize that the entirety of Present Invention 1 has the same effect from the description of Examples 1 to 5 in Present Corrected Description.

(c) In view of the above, the description of the written statement in the above B is not sufficient to find that Present Invention 1 has a remarkable and specific effect compared to Invention 1 of Exhibit Ko 1', and no other evidence to find so is found.

Therefore, it cannot be said that Present Invention 1 has a remarkable and specific effect compared to Invention 1 of Exhibit Ko 1'.

(2) Regarding the allegations of Defendant

A Defendant makes various allegations (the above IV, 1 (2) B (c) a to c) for evaluating Present Invention 1 as having a prominent effect based on the results of the comparative tests described in the statement (Exhibit Ko 21) in the above (1) B.

However, in light of the explanation in the above (1), all of the above allegations cannot be adopted.

B Defendant alleges that Present Invention 1 should be evaluated as having a prominent effect based on the fact that Present Invention has improved performances for the half-life and the light emission efficiency in comparison with the symmetric dinaphthylanthracene of a comparative example described in Present Corrected Description (the above IV, 1 (2) B (c) d).

However, since no prominent effect is found in comparison with Invention 1 of Exhibit Ko 1', the above allegation cannot be adopted.

C Defendant alleges that

when the scope of a patented invention as a generic conception is extremely broad (and the construction thereof is even doubted), the requirement for a prominent operational effect allows only an inventor holding the generic conception to acquire a patent with a wide scope and this prevents competitors from making an invention, thereby impeding fair competition and constituting a hindrance to industrial development; and thus, the novelty or the inventive step should be granted to an invention with a subordinate conception even without the need of requiring a remarkable operational effect (the above IV, 1 (2) B (c) e).

Regarding the above allegation, it is essentially doubtful to determine whether or not the requirement for a remarkable specific effect is needed only in accordance with an ambiguous standard that "the scope of a patented invention as a generic conception is extremely broad." Aside from that point, it is construed that the purport that, in allowing the patentability when an invention of patent application is covered by another invention stated in a prior publicly known document as a subordinate conception thereof, the invention should satisfy the requirements that the invention is not specifically disclosed in a prior publicly known document and produces a remarkable specific effect in comparison to the another invention stated in the prior publicly known document, resides in the point that the invention as a subordinate conception is already publicly disclosed, makes no novel contribution to industrial development, and should not be patented essentially; however, when the above requirements are satisfied, it agrees with the spirit of the Patent Act with the object of encouraging an invention contributing to the industrial development. Considering the above, each of the above requirements is essential when a patent is exceptionally granted to an invention as a subordinate conception.

Accordingly, the allegation of Defendant, which is opposite to the purport, cannot be adopted.

### 3 Summary

In view of the foregoing, the determination of the Trial Decision that Present Invention 1 could not have been easily made by a person ordinarily skilled in the art based on Invention 1 of Exhibit Ko 1, etc. is erroneous.

In addition, the determination of Trial Decision on Present Inventions 2 to 14 is also erroneous due to the same reason.



## VI. Conclusion

Accordingly, the claim of Plaintiff is grounded and thus allowed, and the judgment is made as in the main text.

Intellectual Property High Court, 3rd Division

Presiding judge:	ISHII Tadao
Judge:	NISHI Rika
Judge:	KAMIYA Kouki