２００７年度第５回知的財産翻訳検定＜英文和訳＞
【機械工学分野】

※解答作成前に必ず下記の注意事項に目を通してください。

【解答にあたっての注意事項】
１．問題は 3 題あります。それぞれの問題の指示に従い、3 題すべて解答してください。
２．問１および問３の解答にあたっては図面を参照してください。
　これらの図は本文上部にある「課題図表の表示・非表示」ボタンをクリックして
　閲覧できます。

問１．次のクレーム（claims）を日本語に翻訳してください。なお、翻訳にあたっては、＜スタート＞から＜エンド＞までとし、クレームの後ろの明細書の記載（抜粋）および図面を参考にしてください。

＜スタート＞

1. A display system, comprising:
a light source;
a display panel; and
an arrangement of light management layers disposed between the light source and the display panel so that the light source illuminates the display panel through the arrangement of light management layers, the arrangement of light management layers comprising a fluted plate, the fluted plate comprising a front layer facing the display panel, a back layer facing the light source and a plurality of connecting members connecting the front and back layers.

2. A system according to claim 1, wherein at least one of the front and back layers comprises a first light management layer.

3. A system according to claim 2, wherein the connecting members comprise first and second connecting members, the first connecting members being connected to the front layer, the second connecting members being connected to the back layer, the first light management layer being attached to one of the first connecting members and the second connecting members.

＜エンド＞

【参考】明細書の記載（抜粋）

A schematic exploded view of an exemplary direct-lit LC display device 100 is presented in FIG. 1. Such a display device 100 may be used, for example, in an LCD monitor or LCD-TV. The display device 100 is based on the use of an LC panel 102, which typically comprises a layer of LC 104 disposed between panel plates 106.

An upper absorbing polarizer 108 is positioned above the LC layer 104 and a lower absorbing polarizer 110 is positioned below the LC layer 104. A backlight 112 includes a number of light sources 116 that generate the light that illuminates the LC panel 102.

An arrangement 120 of light management layers may include a diffuser layer 122 and a support layer 130. The diffuser layer 122 is used to diffuse the light received from the light sources, which results in an increase in the uniformity of the illumination light incident on the LC panel 102. The support layer 130 advantageously includes a fluted plate, which is a plate that includes flutes, or spaces, between the two surfaces of the plate. A cross-sectional view of an exemplary fluted plate 200 is schematically illustrated in FIG. 2A. The fluted plate 200 includes a first layer 202 and a second layer 204, with connecting members 206 connecting the first and second layers 202, 204. The open spaces 208 surrounded by the connecting members 206 and the first and second layers 202, 204 may be considered to be flutes.

【問 1・課題図表（機械工学）】

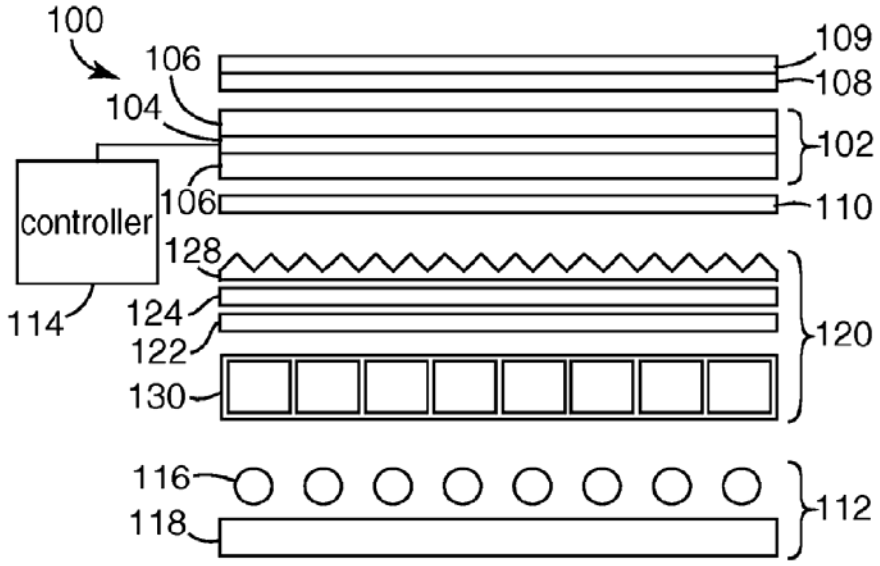

FIG. 1

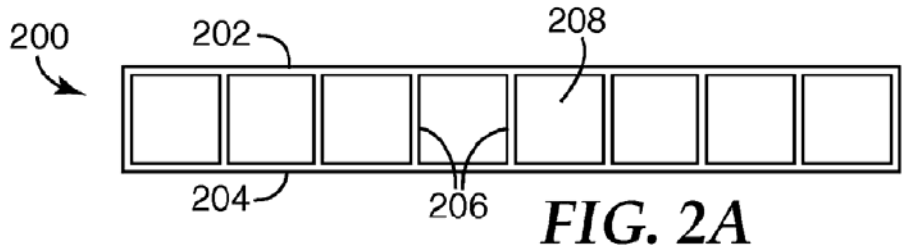

FIG. 2A

問２．次の文を＜スタート＞から＜エンド＞まで日本語に翻訳してください。

＜スタート＞

BACKGROUND OF THE INVENTION

In addition to commercial and military aircraft, another area in which the excellent performance characteristics provided by carbon-carbon composite brake materials is appreciated is in the field of high performance automobiles, such as those used in Formula I racing.

SUMMARY OF THE INVENTION

High initial friction coefficient, or ″bite″, is a desirable property in Formula I racing friction brake materials. High bite, or instantaneous initial friction coefficient, provides the race driver with an increased feeling of control. Conversely, low initial friction coefficient may be desirable in some applications where ″grabbiness″ is undesirable. The present invention provides a means for adjusting the bite characteristics of carbon-carbon composite materials that will be used to make brake pads.

Bite is believed to be related to the rate of temperature rise and temperature distribution in the interface between the brake pad and the brake rotor, with higher temperatures at the interface resulting in improved bite. It has been found that in-plane thermal conductivity of the pad material influences bite, and that, surprisingly, conducting the post-carbonization heat treatment at temperatures lower than the conventional temperature, for instance, at 2000˚C, significantly improves initial friction coefficient. Brake pads manufactured in accordance with this invention also have significantly improved wear properties.

＜エンド＞

問３．次の文を＜スタート＞から＜エンド＞まで日本語に翻訳してください。なお、翻訳にあたっては図面を参考にしてください。

＜スタート＞

After stator core segments 20 are positioned within containment structures 30 and 40 to form a flexible strip assembly 10 as depicted in Fig. 1, which will later be bent into an annular shape, winding coils are wound about the stator teeth 22 so as to form a plurality of phase windings. In the example of Fig. 1, winding coils may be positioned to provide three phase windings, with each phase winding including four winding coils, but the present invention is not restricted to these numbers.

The phase windings are formed by the following process. First, beginning of one phase winding is inserted into a terminal retention feature 31a, following which a winding coil is formed about the appropriate stator tooth 22. The wire is run out towards the back

of the containment structure 30 through a slot 33, through the back of the portion of the containment structure associated with the next two adjacent stator teeth, bringing the wire in towards the tooth of the third adjacent stator teeth through an unshown slit in the containment structure. This process is repeated until all the winding coils for the phase winding are formed.

＜エンド＞

【問 3・課題図表（機械工学）】

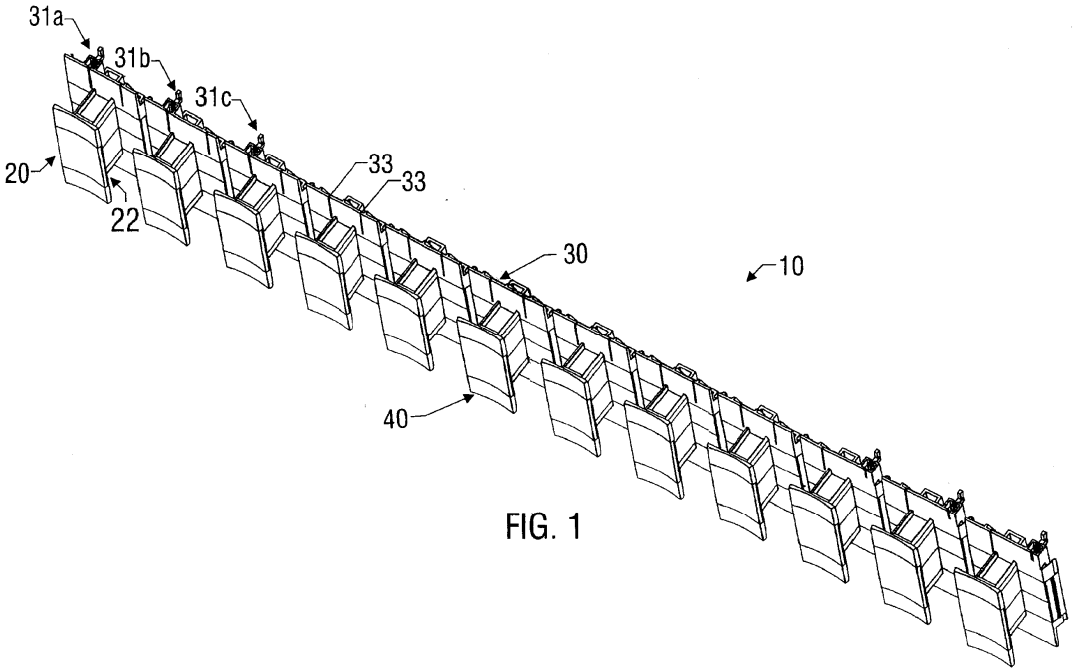

FIG. 1