★★★ ＜第34回知的財産翻訳検定試験【第18回和文英訳】＞ ★★★
≪２級課題≫

【問 1】
[0004] In order to reduce the amount of emission of carbon dioxide, biomass that is carbon-neutral renewable biological organic matter, (for example, plant biomass, such as wood and plants, etc.) is used globally as fuel for boilers and combustion apparatuses.
Ingredients, such as lignin that is the main component of the biomass, are separated from other ingredients, such as sugars, and then converted and used as raw materials for higher value-added chemical products.
The ingredients, such as sugars, which are also a main component of the biomass, can be converted into transportation fuels and raw materials for chemical products for use.
[0005] For this reason, various pretreatment processes for separating the biomass into ingredients, such as lignin, and sugars, have been proposed.
One example is a process of using ammonia (liquid-ammonia processing).
Conventional treatment methods require treatment in a high-temperature and high-pressure atmosphere to reduce the amount of ammonia used.
[0006] When liquid-ammonia processing is incorporated in an ammonia utilization system, and the ingredients, such as lignin that is a main component of the biomass, are recovered as a soluble portion, it is possible to recover residues after ammonia vaporization, without the need for a high-temperature and high-pressure atmospheres such as supercritical or subcritical condition. These processes enable utilization of raw materials for these biomass-derived chemical products.
In addition, recovery of components such as polysaccharides, which are components of biomass, as insoluble components enables recovery that does not require the above-mentioned high-temperature and high-pressure atmosphere, such as supercritical or subcritical atmosphere.
These polysaccharides can be used as biomass-derived raw materials (raw materials for chemical products and for transportation fuels).

【問 2】
[0005] An embodiment of the syringe of the present invention will now be described with reference to Fig. 1.
The syringe has at least the following components:
an outer cylinder B composed of a reduced-diameter tip portion (referred to also as a “cylinder tip”) 8 having an internal bore of a small-diameter, and a large-diameter portion 11 capable of storing an injectable solution therein;
a needle assembly A including a needle tube 1 having a base end 4 insertable into the internal bore of the cylinder tip 8; and
a plunger having a gasket 9.
When the needle assembly A and the outer cylinder B are joined together, the base end 4 of the needle assembly 4 projects into the internal bore of the cylinder tip 8 and fits into a needle fitting portion 5 (to be described later).
[0006] The wall defining the internal bore of the cylinder tip 8 has a tapered portion 13 the diameter of which increases toward an open end.
The tapered portion 13 continues to the aforementioned needle fitting portion 5 presented as a minimum-diameter portion of the wall defining the internal bore of the cylinder tip 8.
The needle fitting portion 5 can receive the base end 4 of the needle tube 1 inserted into the cylinder tip 8 and hold the needle tube 1 in a fitting state.

【問 3】

1. A wearable device for visually impaired persons configured to produce voice signals upon sensing visible light signals from a traffic signal lamp, the wearable device comprising:
a main part configured to be mounted on the head of a wearer;
a light receiving unit provided on a side of the main part facing away from the wearer and configured to convert the light signals into electric signals; and
an aural signal generating unit mounted on the main part and configured to convert the electric signals into aural signals; and
a voice generating unit mounted on the main part and configured to generate voice in accordance with the aural signals.

2. The wearable device of claim 1, wherein the main part comprises an eyeglasses assembly having left and right lenses, and wherein the light receiving unit includes photoelectric conversion films provided to cover the left and right lenses.

3. The wearable device of claim 1 or 2, further comprising a red light transmitting filter covering one of the lenses and transmssive only to red light, and a blue light transmitting filter covering the other of the lenses and transmissive only to blue light.

4. The wearable device of claim 1, wherein the main part comprises a head wear and the light receiving unit is provided on a front side of the head wear.

5. The wearable device of claim 1 or 4, wherein the voice generating unit comprises an earphone.