

★★★ 2009年度第9回知的財産翻訳検定<第4回英文和訳> ★★★

《2級》

【解答にあたっての注意】

1. ***START***から***END*** までを和訳してください。
 2. 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。
 3. 課題文に段落番号がある場合、これを訳文に記載してください。
-

[問1] 下記の英語クレームを和訳しなさい。

START

An industrial robot, comprising: a first robot part; a second robot part movably arranged with respect to the first robot part; and a balancing arrangement operatively connected to the first robot part and the second robot part to counteract gravity when the robot parts are pivoted, the balancing arrangement comprising a housing having a first end and a second end, a first attachment attached to the first end of the housing and a second attachment, the first attachment and the second attachment being operative to pivotably attach the balancing arrangement to the first robot part and the second robot part, a telescopic unit comprising a guide tube attached to the first end of the housing and a pull rod slidably arranged about the guide tube, wherein the second attachment is operatively connected to the guide tube, a first spring seat arranged at the second end of the housing, a second spring seat operatively connected to the pull rod, and a helical spring unit arranged between the first spring seat and the second spring seat.

END

[問2] 下記英文はある発明に対する背景技術について記述したものです。これを和訳しなさい。

START

There is currently a need for hydrogen to play a greater role in the energy market because of the increasing demand for fuel cell systems and the growing demand for reduction of greenhouse gases and zero-emission fuels. Hydrogen production must keep pace with this growing market demand, but there are still some technical and

infrastructure hurdles that first need to be overcome. In the future, increased hydrogen production will most likely be met by conventional technologies, such as natural gas reformation. In these processes, hydrogen is produced and the carbon is converted to carbon dioxide and released to the atmosphere. With the growing concern of global climate change, alternatives to the atmospheric release of carbon dioxide are needed. Sequestration of carbon dioxide is an option but it is also energy intensive and expensive. Better methods of hydrogen production are needed, including environmentally friendly methods that do not produce carbon dioxide.

Reducing the demand for fossil resources remains a significant concern for most industrialized nations. Renewable resource based processes including solar or wind driven electrolysis and photolytic water splitting hold promise for clean hydrogen production. Such processes are desirable but considerable advance must be made before these processes are technologically feasible and economically competitive.

END

[問3] 下記英文はある発明の実施例について記述したものです。これを和訳しなさい。

START

FIG. 1 shows a block diagram of a sensing device 100 according to an embodiment. The sensing device 100 includes a first sensor 102, a second sensor 103 and an electrical circuit 104. The electrical circuit 104 is connected to both the first sensor 102 and the second sensor 103.

The first sensor 102 and the second sensor 103 draw a first electrical signal 112 and a second electrical signal 113, respectively. The first and second electrical signals 112, 113 correspond to values of one or more physical properties sensed by the first and second sensor 102, 103 respectively. The electrical circuit 104 draws a third electrical signal 114. The electrical circuit 104 is adapted to draw the third electrical signal 114 such that the total electrical signal 110 drawn by the sensing device 100 is proportional to either the first electrical signal 112 or the second electrical signal 113, whichever has a higher value.

In an embodiment, the electrical signals 112, 113, 114 drawn by the sensors 102, 103 and the electrical circuit 104 are current signals. In this embodiment, the electrical circuit 104 is constructed in such a way that the total current 110 drawn by the sensing device 100 is always proportional to the current 112, 113 having a higher value.

END