★★★ ＜第25回知的財産翻訳検定試験【第12回英文和訳】＞ ★★★
≪１級課題 -電気・電子工学-≫

【解答にあたっての注意】
１．問題の指示により和訳してください。
２．解答語数に特に制限はありません。適切な箇所で改行してください。
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。
４．課題は３題あります。それぞれの課題の指示に従い、３題すべて解答してください。

問１．次はオーディオコンテンツ配信に関するクレームです。日本語に訳してください。

1. A method of identifying an audio content sample that originates from an actual broadcast, including:

monitoring a plurality of broadcast stations, fingerprinting and saving the fingerprints of broadcast audio content in a database of unidentified broadcast content as it is received;

accessing playlists, comprising portions of identified broadcast audio content from the plurality of monitored broadcast stations, and fingerprints corresponding to the identified broadcast audio content;

receiving data representing sampled audio content from a portable device and searching for a match between fingerprints of the sampled audio content and the fingerprints corresponding to at least parts of multiple playlists, further including:

upon finding a fingerprint match against the fingerprints corresponding to a particular playlist for a particular monitored broadcast station, reporting the particular monitored broadcast station as a source of the broadcast audio content, and a description of the broadcast audio content back to the portable device; and

upon not finding a fingerprint match against the fingerprints corresponding to any of the multiple playlists, further searching for a match of the fingerprints of the sampled audio content, against at least

one of: parts of the database of unidentified broadcast content from the monitored broadcast stations, to identify a source of the broadcast audio content; and a reference database of identified audio content not associated with a particular broadcast station, to identify the sampled audio content; and

reporting back to the portable device at least one of the source of the broadcast audio content and the identity of the sampled audio content.

問２．次の英文は、レーザーを用いた位置測定に関する従来技術の説明です。符号(Ａ）で囲まれた部分を日本語に訳してください（必要であれば、内容の正確さが担保される限りにおいて、一文を区切って二文で表現するなど、工夫を凝らしていただいて構いません)。

Measuring devices, which are implemented for progressive tracking of a target point and a coordinative position determination of this point, can generally, in particular in conjunction with industrial surveying, be summarized under the term laser trackers. A target point can be represented in this case by a retroreflective unit (for example, a cube prism), which is targeted using an optical measurement beam of the measuring device, in particular a laser beam. The laser beam is reflected in parallel back to the measuring device, wherein the reflected beam is captured using a capture unit of the device.

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An emission or reception direction of the beam is ascertained in this case, for example, by means of sensors for angle measurement, which are associated with a deflection mirror or a targeting unit of the system. In addition, a distance from the measuring device to the target point is ascertained with the capture of the beam, for example, by means of runtime or phase difference measurement or by means of the Fizeau principle.

In addition, in modern tracker systems, a deviation of the received measurement laser beam from a so-called servo-monitoring point is ascertained on a sensor--increasingly as a standard feature. By means of this

measurable deviation, a position difference between the center of a retroreflector and the point of incidence of the laser beam on the reflector can be determined and the alignment of the laser beam can be corrected or tracked as a function of this deviation such that the deviation on the sensor is decreased, in particular is "zero", and therefore the beam is aligned in the direction of the reflector center. By way of the tracking of the laser beam alignment, progressive target tracking (tracking) of the target point can be performed and the distance and position of the target point can be progressively determined in relation to the tracker system. The tracking can be implemented in this case by means of an alignment change of the deflection mirror, which is movable by a motor, provided for deflecting the laser beam and/or by a pivot of the targeting unit, which has the beam-guiding laser optic.

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問３．次の英文は、いわゆるＭＲＩに関するものです。添付のＦＩＧ．１を参照しつつ、文章全体を日本語に訳してください。

Here, a basic field magnet 10 of the magnetic resonance device 9 generates a temporally constant strong magnetic field for polarization or orientation of the nuclear spin in an examination region of an examination object 11, for example a human body, which while lying on an examination table 12 is pushed into the magnetic resonance device 9 for the examination. The high level of homogeneity of the basic magnetic field 10 needed for the nuclear spin resonance measurement is defined in a typically spherical measurement volume M, into which the examination object 11 is pushed. To support the requirements for homogeneity and in particular to eliminate temporally invariable influences the magnetic resonance device comprises so-called shim sheet materials 9 made of ferromagnetic material at a suitable point. Temporally variable influences are eliminated by shim coils 13 if they are not desired. These are also used when generating nonlinear gradients.

The basic field magnet 10 is likewise used as an enclosure for a

cylindrical gradient field system 14 of the magnetic resonance device 9, which comprises three partial windings. Each partial winding is supplied by an amplifier 17 of the magnetic resonance device 9 with power for generating a linear gradient field in the respective direction of the Cartesian coordinates system. The first partial winding generates a gradient Gx in the x direction, the second partial winding a gradient Gy in the y direction and the third partial winding a gradient Gz in the z direction.

FIG.1