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

【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．次の従来技術に関する記載を和訳してください。冗長な英文表現にとらわれず、従来技術の問題点や技術的記載が明確にわかるように心がけてください。

[0002] Few childhood experiences are as unpleasant as a visit to the dentist. In addition to the actual discomfort of the treatment, that unmistakable odor, and the high-pitched sound of the drill, the grotesque shapes of the periodontal scalers, excavators, and hand cutting instruments often leave deep-rooted impressions of nightmarish experiences at the dental office. Accordingly, even in adulthood, many will habitually procrastinate a dental appointment, since the perceived discomfort of the treatment that has been ingrained in the subconscious mind seems to outweigh the need for care at the moment, resulting in neglect of decay that can ultimately claim the tooth, subjecting the patient to far more pain than necessary.

[0003] While many great advances have been made in the drills and substances used in dentistry, the shapes of these hand-held tools remain as ghoulish as ever, the primary reason being that these trademark curvatures and angles of the distal ends are actually functionally optimal for the job. PTL 1 discloses a happy-looking pediatric dentistry tool having a spherical shroud at the tip that conceals these shapes from view of the child until inside the mouth. The dentist or hygienist can then proceed with scraping, polishing, or the like, as necessary. However, this shroud is not completely retractable, and tends to obstruct the view of the one administering treatment.

問２．次の実施形態の抜粋を和訳してください。

[0055] To prevent excess wear of the surface of the photosensitive drum on which are formed electrostatic latent images, a lubricant delivery mechanism is provided that delivers a liquid lubricant thereto, thereby reducing the friction coefficient on the surface thereof. This mechanism primarily is realized in the form of a delivery roller 20 having a reservoir layer 22 accommodating the lubricant, formed on a support member 21, and an outer layer 23 on the outer side of the reservoir layer 22. The support member 21 is a copper rod in the present embodiment, but this is not restrictive, and may be formed of metal, metal alloy, plastic, ceramic, glass, or any combination thereof.

[0056] The reservoir layer 22 is a porous elastomer matrix having pores 10 to 20 microns in diameter. These pores serve to transport the lubricant from the supply unit (omitted from illustration) to the surface of the photosensitive drum. The outer layer 23 is an elastomeric material, having pores that are substantially smaller than those of the reservoir layer 22.

[0057] Now, since the viscosity of the lubricant can vary significantly with temperature, the physical properties of the materials of the delivery roller 20, the pore size, density, and distribution, and so forth, need to be carefully designed to allow for a constant and uniform delivery amount regardless of temperature.

問３．指定用語を使用し、次の方法クレームを日本語に訳して下さい。翻訳にあたっては、添付の図面を参考にし、適宜、改行を施してください。

CLAIMS

1. A method of constructing a railway carriage side-wall frame assembly of a kind having a plurality of spaced elongate upright structural elements (14, 21) interconnected with one or more elongate horizontal structural elements (12) to form a structural framework comprising the steps of forming the structural elements of required length and cross-sectional shape, thereafter providing for each interconnection between upright and horizontal structural elements a deformed portion (25) on one of the

elements for locating the other structural element at the interconnection, by means of a tool having a deforming tool part, the relative positions of the tool part and said one structural element being adjustable to enable variation of the position of the deformed portion (25) along the length of said one structural element, and thereafter interconnecting the elements together at said deformed portion (25) with said other element located by said deformed portion (25).

指定用語

構造要素	: structural element
構造骨組	: structural framework
客車	: railway carriage
側壁フレーム	: side-wall frame
側壁フレーム組立	: side-wall frame assembly
変形部	: deformed portion
変形工具部	: deforming tool part

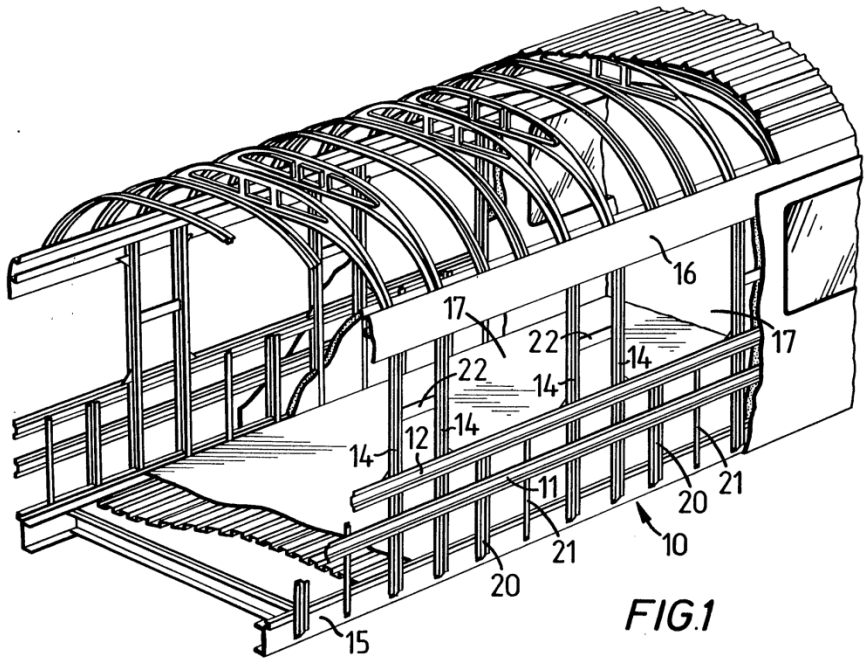

FIG.1

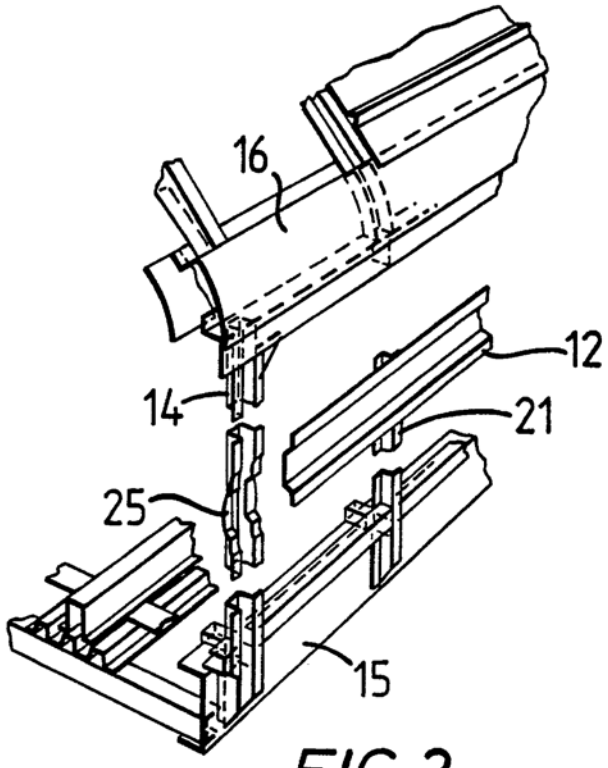

FIG.2