

Flexible Protective Coverings Having Persistent Visual Identifiers

Provisional Patent Application Specification

1. Field of the Invention

The present invention relates to protective sheet materials such as tarps, drop cloths, plastic sheeting, and other flexible protective coverings. More particularly, the invention relates to visual identification systems for flexible protective coverings that enable recognition of predetermined covering characteristics through persistent visual identifiers integrated into the covering material.

2. Technical Problem

Flexible protective coverings such as tarps, drop cloths, and protective sheets are frequently stored in folded, stacked, or bundled configurations where coverings of different sizes or classifications become visually indistinguishable. Determining the desired covering typically requires unfolding, lifting, or manipulating multiple coverings, which slows task preparation and increases the likelihood of selecting an incorrect covering.

3. Solution

The present invention provides flexible protective coverings having persistent visual identifiers integrated into the covering material and extending across or distributed across the covering surface such that predetermined covering characteristics may be recognized through visual observation of the covering surface from substantial viewing distances or from randomly visible portions of the covering surface without requiring unfolding, lifting, or manipulation of the covering.

4. Core Invention

The covering includes a persistent visual identifier integrated into the covering material and extending across or distributed across the surface of the material, the identifier being configured to enable recognition of predetermined covering characteristics independent of orientation from substantial viewing distances and from randomly visible portions of the covering surface without requiring unfolding, lifting, repositioning, or manipulation of the covering.

5. Representative Embodiments

The following description sets forth representative embodiments of flexible protective coverings having persistent visual identifiers configured to enable recognition of predetermined covering characteristics from substantial viewing distances and from randomly visible portions of the covering surface.

6. Operational Example

In practical use, flexible protective coverings are frequently stored together in contractor vans, storage shelves, or job-site staging areas where coverings of multiple sizes or classifications may be mixed together.

7. Recognition by Users

Users familiar with the visual classification system may recognize the covering classification through visual observation of the covering surface.

8. Visual Identifier Implementations

Visual identifiers may include colors, tonal variations, grayscale distinctions, patterns, graphics, material contrasts, or other visually distinguishable surface characteristics integrated into the covering material.

9. Edge and Surface Identifier Embodiments

The persistent visual identifier associated with the covering may extend across the surface of the covering material, may be repeated across the surface, or may appear on edges, hems, seams, reinforced corners, grommet regions, or other portions of the covering material.

10. Definitions

Flexible Protective Covering: sheet-like protective materials capable of being folded, stacked, rolled, draped, or stored in non-flat configurations including tarps, canvas drop cloths, plastic sheeting, coated fabrics, reinforced polymer sheets, absorbent protective coverings, and composite protective coverings.

Persistent Visual Identifier: a visually distinguishable surface feature integrated into the covering material and intentionally assigned within a visual classification system to represent a predetermined covering characteristic recognizable by users familiar with the system.

11. Design-Around Prevention

The persistent visual identifiers described herein are intentionally associated with predetermined covering characteristics within a visual identification system for flexible protective coverings. The identifiers represent persistent classifications rather than temporary production variations, aesthetic design choices, or manufacturing color variations.

12. Scope of the Invention

The persistent visual identifier system described herein may be implemented using any visually distinguishable surface feature integrated into a flexible protective covering.

13. Variations

Various modifications, variations, and alternative configurations will be apparent to persons skilled in the art and are intended to fall within the scope of the invention.