

Patent Specification

CURVING STONE

Definition

Stone : As defined in usage as Building Material, Furnishing Element, Daily Ware, Ornaments, etc, includes Marble, Granite, Onyx, Limestone, Dolomite, Slate, Travertine, Basalt, Quarzite, Jasper, Lapis Lazuli, Fossil, etc.

Curving : A process of changing the shape of material from a plane, flat shape, into bended, curvy shape, be it in single axis, two axis or in all three axis.

Abstract

Three special characters of Stone that is a shortfall in industrial applications, i.e.:

Weight, it is quite heavy compared to other materials such as wood, plastics, aluminum, etc. Recently, it can be cut very thin such as a few milimeters to reduce the weight.

Fragile, it is very easily broken when it is not thick enough, so after thinning it, we can laminate the thin stone slab with plyboard, aluminum honeycomb, acrylic sheet, etc.

Rigid, its shape is mostly 'flat', as in common application in floor, wall, furniture top and skirting, rectangular wares, etc.

To negate this rigidity property of stone, we engineered the stone into curvy shapes by cutting it from a larger block into curved shape, such as in Roman columns, eating wares, bath tubs, etc. However, not only it is a very wasteful, tedious and expensive process, the blocks of stone is not always readily available in commercial terms, most are readily available in slabs, normally in 2cm, 3 cm, or certain thickness. Also we can never predict the quality, color, pattern of the inside part of the block. While with slabs, we can always choose the ones suitable to our needs, thus easier, less risky, in terms of mismatch with our objectives, and less costly.

This invention offer a solution by taking a readily available stone slabs, cut it thin, to the requirements of the desired shape and size, curve it accordingly, then apply it to the intended purposes, such as cladding the concrete columns, laminating a curvy back of the bed headboard, etc. We may even extend the application of the curved thin stone slabs as an integral part of the clothing, as it is quite flexible and light. No more just as an ornamental brooches or belt head, etc.

Keyword : stone, marble, curved, slab