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(71) Applicant(s)  
**Dayton Deetz**

(72) Inventor(s)  
**Deetz, Dayton Joseph**

(74) Agent / Attorney  
**Shelston IP, L 21 60 Margaret St, Sydney, NSW, 2000**

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(72) Inventor; and

(71) Applicant : DEETZ, Dayton, Joseph [US/US]; 73  
Washington Street, Mendon, MA 01756 (US).

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(54) Title: MAGNETIC GRAPHIC WALL SYSTEM

(57) Abstract: The practical application of incorporating magnetic receptive printing media coupled with the use of an underlying specifically referenced magnet allows the multi layering of magnetic media while maintaining the reference of position on said surface. This is achieved by aligning the polarity lines to the benefit of the intended design while fabricating the first layer to receive the second or subsequent layers to interact with the intended design.

## MAGNETIC GRAPHIC WALL SYSTEM

### BACKGROUND OF THE INVENTION

[0001] Any discussion of the prior art throughout the specification should in no way be considered as an admission that such prior art is widely known or forms part of common general knowledge in the field.

[0002] This invention incorporates the use of our patented printing media combined with a magnetized sub surface with alternating polarity lines. This allows the application of a magnetic receptive (changeable surface) and secondly the layering of such surfaces including other magnetized media with corresponding polarity lines. When this system is employed you can simply mount all types of graphics and other objects affixed with the magnet and they will lock into place pre determined. This ensures all objects being level and referenced in the place desired over the changeable surface. Improvements can be made by utilizing Fe<sub>3</sub>O<sub>4</sub> (Magnetite) from the Spinel group in size distribution that creates a fully filled surface. Incorporating a range of particle sizes that lends itself to leveling out to a smoother finished surface. We have developed a new standard of critical size requirement that plays out as follows. Using a preferred size of particle for your given requirement. It is important to maintain a range of what we call the 20- 80 xps (seven times particle size multiplier). In short this is a separation of media that keeps all particles employed having a distribution of 20% through 80% of the particles that fall in a specified size range, for example, using particle sizes from 4 to 28 microns having 4 microns and smaller at the 20% and 28 microns and smaller at 80% gives you a size range capable of creating an almost solidly filled surface. All spaces between each of the larger particle sizes are filled in with each smaller sized particle until you have utilized your range of particles. This makes for a coating with a higher particulate load in a dry film thickness of a thinner standing than using standard screened particles with narrow ranges. Fe<sub>3</sub>O<sub>4</sub> is one of the most naturally magnetic substances on earth and will build a magnetic field over time when exposed to said field. This will allow the use of less material when coating a substrate yielding a thinner finished sheet and develop a stronger magnetic bond over time

[0003] We have developed numerous magnetic receptive products from paints to papers and this product line incorporates all products to produce a fully dynamic interactive wall system. The need for an easy to use magnetic system that has a neat presentation is paramount. By incorporating a layer of magnet, the first surface, then applying a second

layer of magnetic receptive media you can place a third layer with the same magnet as the first layer having the same polarity lines in reference with each other. This will allow one to design the connection of the polarity lines to be beneficial to ones design intents.

[0004] This will work for entire wall systems ideal for Retail Graphics, Menu Boards, Museums, Displays, Corporate Settings and more.

#### **ADDITION TO SPECIFIC SPECIFICATIONS**

[0005] When producing a sheet for certain printers it is important to have either a void of coating on the coated side such that the electronic eyes of said printers could detect the material. This can also be achieved by back printing lines or other detectable graphics on the coated side.

#### **SUMMARY OF THE INVENTION**

[0006] It is an object of the present invention to overcome or ameliorate at least one of the disadvantages of the prior art, or to provide a useful alternative.

[0007] To this end, the present invention provides a magnetic wall system comprising: a first layer, said first layer being a sheet of magnet having alternating polarity lines, a second layer, said second layer being a sheet of a magnetic receptive material having printing thereon, said second layer itself being nonmagnetic, and a third layer, said third layer being a sheet of magnet having alternating polarity lines, wherein said second layer is layered on top of said first layer, and said third layer is layered on top of said second layer, and wherein the alternating polarity lines of said third layer correspond with those of said first layer such that said third layer locks into place in reference with said first layer via said alternating polarity lines of said first layer and of said third layer.

[0008] Unless the context clearly requires otherwise, throughout the description and the claims, the words "comprise", "comprising", and the like are to be construed in an inclusive sense as opposed to an exclusive or exhaustive sense; that is to say, in the sense of "including, but not limited to".

[0009] This system allows for an invisible hanging system on a given surface that will allow the ordinary person without a level, adhesive, tapes or any other fastening system to hang framed art work, graphics, signs, hook, shelves and the like anywhere they desire. This

is accomplished by using a multiple layering system utilizing sheet rubber magnet and magnetic receptive layers some including the same sheet magnet as first layer to build a dynamic presentation.

Example

[0010] The following example is presented to further illustrate and explain the present invention and should not be taken as limiting in any regard.

Example 1

[0011] .030 rubber extruded sheet magnet with polarity lines running along the surface in a concentration of 13 lines per inch. This is applied to a wall area in a retail environment. The wall paper is printed on the magnetic receptive films and simply rolled out on the wall using no adhesive just the magnetic force. Additional graphics are layered on top of second surface. A menu board made from thick plastic sheet stock having the same magnet adhered to front and back surface. Menu graphics layered to front surface of menu board and all pricing and applied graphics are attached to menu board graphic with magnet of first surface.

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## CLAIMS

1. A magnetic wall system comprising: a first layer, said first layer being a sheet of magnet having alternating polarity lines, a second layer, said second layer being a sheet of a magnetic receptive material having printing thereon, said second layer itself being nonmagnetic, and a third layer, said third layer being a sheet of magnet having alternating polarity lines, wherein said second layer is layered on top of said first layer, and said third layer is layered on top of said second layer, and wherein the alternating polarity lines of said third layer correspond with those of said first layer such that said third layer locks into place in reference with said first layer via said alternating polarity lines of said first layer and of said third layer.
2. The magnetic wall system of claim 1, wherein said polarity lines of said first layer and said third layer are in a concentration of 13 lines per inch.
3. The magnetic wall system of claim 1, wherein said first and third layers are rubber extruded sheet of magnet.
4. The magnetic wall system of claim 1, wherein said magnetic receptive material is magnetite.