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## (54) Title of the invention: THE EFFECT OF FIBER CONTENT ON PHYSICAL, CHEMICAL PROPERTIES OF FIBER AND DUST POWDER COMPOSITE

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#### (57) Abstract:

The present invention relates to that Basalt fiber and marble dust powder reinforced polymers composites have been investigated with different fiber length the following conclusion were drawn. The characterization of the composites reveals that the fiber length is having a significant effect on the mechanical properties of composites and also fiber content. The optimum fiber weight percentage of 8-12 % of fiber and optimum length of the fiber of 13 mm were investigated. The length of reinforced basalt fiber plays a significant impact on some mechanical properties, Impact strength of basalt fiber reinforced composite of 13 mm length shows the maximum impact energy absorption in all the percentage of fiber.

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