Claims

What we claim:

1. A board, comprising palm fiber, MgO, $MgCl_2$, ~~filter~~filler and water, wherein the palm fiber does not require removal of residual oil that exists in the oil palm material, and the palm fiber is obtained by grinding an Empty Fruit Bunch (EFB).

2. The board of claim 1, wherein the palm fiber occupies from about 5% to 50% of the volume of the board.

~~3. The board of claim 1 or 2, wherein the palm fiber is obtained by grinding the Empty Fruit Bunch (EFB).~~

43. The board of claim ~~3~~1 or 2, wherein the palm fiber has an average particle size of 0.5 mm to 30 mm.

~~5. The board of claim 1 or 2, wherein the palm fiber does not require removal of residual oil that exists in the oil palm material.~~

~~6~~4. The board of claim 1 or 2, wherein the filler is a lightweight material selected from coal ash, glass microspheres, nano inorganic material and combination thereof.

~~7~~5. The board of claim 1 or 2, wherein the contents of the ingredients are selected from one or more of the followings:
palm fiber: 5-50 wt% of the weight of the board;
MgO: 25-49 wt% of the weight of the board;
$MgCl_2$: 12.5 – 24.5 wt% of the weight of the board;
Filler: 3-15 wt% of the weight of the board.

~~8~~6. The board of claim 1 or 2, wherein the board further comprises a layer of glass fiber netting or mesh on the top and/or bottom of the board.

~~9~~7. A method for producing the board, comprising the following steps:
a) mixing the grinded palm fiber, MgO, aqueous $MgCl_2$ solution, filler and further water to obtain a mixture, wherein the palm fiber does not require removal of residual oil that exists in the oil palm material, and the palm fiber is obtained by grinding an Empty Fruit Bunch (EFB); and
b) curing the mixture obtained in step a).

~~10~~8. The method of claim ~~9~~7, wherein said method further comprises a step a1) prior to the step a):
a1) grinding the Empty Fruit Bunch to obtain the palm fiber;
and/or
a step a2) between the step a) and step b):
a2) rolling the mixture to form the desirable thickness and width.