Claims

1. A grinding tool comprising
   - a main body (2) having
     -- a binder (B),
     -- at least one fiber ply (F_1 to F_4) embedded in the binder (B), and
   - an abrasive layer (3),

   characterized
   in that to achieve a free relative movement within the at least one fiber ply (F_1 to F_4) during grinding, the at least one fiber ply (F_1 to F_4) is arranged in the binder (B) in a partially movable manner.

2. The grinding tool as claimed in claim 1, **characterized**
   in that each fiber ply (F_1 to F_4) comprises a plurality of yarns that are embedded in the binder (B) in a partially movable manner relative to one another.

3. The grinding tool as claimed in claim 1 or 2, **characterized**
   in that the main body (2) comprises a plurality of fiber plies (F_1 to F_4) that are embedded in the binder (B) and are movable relative to one another in some region or regions.

4. The grinding tool as claimed in at least one of claims 1 to 3, **characterized**
   in that the main body (2) comprises a plurality of fiber plies (F_1 to F_4) having a plurality of yarns, and the yarns are embedded in the binder (B) in a partially movable manner relative to one another.

5. The grinding tool as claimed in at least one of claims 1 to 4, **characterized**
   in that the at least one fiber ply (F_1 to F_4) comprises at least one woven fabric and/or at least one non-crimp fabric.

6. The grinding tool as claimed in at least one of claims 1 to 5, **characterized in that** the main body (2) comprises a number N of fiber plies (F_1 to F_4), wherein: $1 \leq N \leq 12$, in particular $2 \leq N \leq 10$, and in particular $4 \leq N \leq 8$.

7. The grinding tool as claimed in at least one of claims 1 to 6, **characterized in that**, for a ratio M of a mass m_B of the binder (B) to a mass m_F of the at least one fiber ply (F_1 to F_4), the following applies: $1/25 \leq M \leq 1/2$, in particular $1/20 \leq M \leq 1/3$, in particular $1/15 \leq M \leq 1/4$, and in particular $1/12 \leq M \leq 1/6$.

8. The grinding tool as claimed in at least one of claims 1 to 7, **characterized in that** the main body (2) comprises damping particles (D), in particular rubber particles and/or foam particles.

9. The grinding tool as claimed in at least one of claims 1 to 8, **characterized in that** the binder (B) is an organic adhesive, in particular phenolic resin, epoxy resin and/or natural rubber.

10. The grinding tool as claimed in at least one of claims 1 to 9, **characterized in that** the main body (2) is of curved design.

11. The grinding tool as claimed in at least one of claims 1 to 10, **characterized by** a supporting layer (29), which is connected to the main body (2) and on which the abrasive layer (3) is arranged.

12. The grinding tool as claimed in at least one of claims 1 to 11, **characterized in that** the abrasive layer (3) is shaped three-dimensionally.

13. A method for producing a grinding tool having the following steps:
    - preparing at least one fiber ply (F_1 to F_4) and a binder (B),
    - producing a main body (2) by heating and then cooling the binder (B), wherein to achieve a free relative movement within the at least one fiber ply

(F_1 to F_4) during grinding, the at least one fiber ply (F_1 to F_4) is arranged in a partially movable manner in the binder (B) after cooling, and

- forming an abrasive layer (3).

14. The method as claimed in claim 13, **characterized in that** a plurality of fiber plies (F_1 to F_4) are used to produce the main body (2).

15. The method as claimed in claim 13 or 14, **characterized in that** the heating of the binder (B) takes place under pressure.

16. The method as claimed in at least one of claims 13 to 15, **characterized in that** preparation takes place in such a way that the at least one fiber ply (F_1 to F_4) is provided with the binder (B) on one side and/or in some region or regions on two sides.

17. The method as claimed in at least one of claims 13 to 16, **characterized in that** preparation takes place in such a way that a first fiber ply (F_1, F_4) without binder (B) is arranged adjacent to a second fiber ply (F_2, F_3) provided with binder (B).

18. The method as claimed in at least one of claims 13 to 17, **characterized in that** preparation takes place in such a way that the at least one fiber ply (F_1 to F_4) is arranged adjacent to a layer of binder (B).

19. The method as claimed in at least one of claims 13 to 18, **characterized in that** a supporting layer (29) is arranged on the main body (2).

20. The method as claimed in at least one of claims 13 to 19, **characterized in that** the formation of the abrasive layer (3) is performed by electrostatic application of abrasive particles (10).