13. The apparatus as claimed in any of claims 10 to 12, further comprising a cover which is arranged above the third heating means and thermally insulates the third heating means from above.

14. The apparatus as claimed in any of claims 10 to 13, further comprising a fourth heating means for heating the quartz crucible from below.

15. The apparatus as claimed in any of claims 10 to 14, further comprising a cooling means which surrounds the growing single crystal.