CLAIMS

1. Holding device (1) for at least one filament (3a,b), comprising:
   at least one filament receptacle (2a, b) for receiving the at least one filament (3a,b), characterized in
   that the holding device (1) is designed for a detachable attachment of the at least one filament receptacle (2a, b) to a container (7) of an ionization device (8); and
   a base body (4) which is connected to the at least one filament receptacle (2a, 2b) via at least one connecting element (5a, 5b), wherein the connecting element (5a,b) is rigid and a pretensioning element (20, 20‘) engages into the connecting element (5a,b) in order to apply a clamping force to the filament receptacle (2a,b).

2. Holding device according to claim 1, wherein the base body (4) has a linear guide (25) for guiding the connecting element (5a).

3. Holding device according to claim 1, wherein the connecting element forms a pivotable arm (5a, 5b) which is connected to the base body (4) via a rotary joint (6a, 6b).

4. Holding device according to any of claims 1 to 3, wherein the pretensioning element is designed as a spring element (20‘) which is preferably connected on the one hand to the base body (4) and on the other hand to the connecting element (5a).

5. Holding device according to claim 3 o, which has two connecting elements in the form of pivotable arms (5a,b) which are each connected to the base body (4) via a rotary joint (6a,b).

6. Holding device according to claim 5, wherein the pretensioning element (20) is designed to pivot the two pivotable arms (5a,b) in opposite directions about each rotary joint (6a,b), in order to fasten the two filament receptacles (2a,b) attached to the pivotable arms (5a,b) on two opposite sides of the container (7) in a clamping manner.

7. Holding device according to claim 1, wherein the pretensioning element (20) is rigid and is guided in a guide track of the base body (4), and in which the pretensioning

element (20) has a free end with an abutment surface (20a) for abutment with the container (7).

8. Holding device according to claim 5, wherein the pretensioning element (20) has a guide element (22) which engages on the two pivotable arms (5a,b).

9. Mass spectrometer (9) comprising:
an ionization device (8) having a container (7) in which an ionization space (12) for ionizing a gas (11) is formed,
at least one holding device (1) according to any of the preceding claims, and
a vacuum housing (18) to which the holding device (1) is detachably connected.

10. Mass spectrometer according to claim 9, wherein the rigidly designed pretensioning element (20) of the holding device (1) abuts with its abutment surface (20a) on the container (7).