radiation can be carried off upwards in an especially simple manner.

Due to the special configuration of the sample room, the samples and the xenon radiator can be properly cooled by a biwired air cooling, whereby the cooling air for the xenon radiator is sucked in from above and that for the samples from below, whereby the cooling air can be conducted directly along the xenon radiator or, respectively, be admitted into one of the faces of the reflector channel, without requiring any troublesome cooling air conduits, which would complicate the entire construction.

In order to obtain a cooling of the samples as uniformly and effectively as possible, the air inlet and outlet slits in the faces of the reflector channel are adjusted to the width of the sample carrier, whereby moreover the air inlet slit is arranged somewhat higher than the air outlet slit in relation to the supporting plane for the samples. In addition thereto, the cooling air can be turbulently admitted in order to obtain an optimally uniform cooling.

In order to be able to arrange as many samples as possible on one sample support, and at the same time to allow a good comparison of the surfaces of the samples exposed to the rays with those not exposed to rays by being covered up, the samples, e.g. color patterns of textile fabric, can be arranged in an overlapping manner.

In order to increase the versatile usability of the device, and especially in regard to the testing conditions, and to reduce the size of the entire device, the horizontal support can be configured as a removable tin tub, which can be lodged in a frame via a floor opening in the sample room.

In order that the surface to be tested is always exactly on the same level even if samples are of different thickness, the tin tub can be configured relatively deep, whereby the samples by correspondingly adjusted supports of different thickness must be brought to the proper level.

In order to create humid test conditions, the tub can be made floodable in an especially simple manner and thereby be adjustable at a certain water level, whereby the flooding installation is directly fastened at the tub and thus can be placed into the device together with the tub. Insofar the entire apparatus does not have to be provided in advance with all equipment in order to simulate the different climatic conditions in the sample room.

In order not to whirl up or press away the water during the flooding operation, the aeration into the sample room can for example be automatically stopped while flooding via a magnetic control and be switched on again together with the flowing-off of the water.

To obtain an especially effective cooling, the tube can have a double bottom, whereby the lower part of the tube is floodable by means of cooling agents. If thereby the intermediate bottom allows a good heat transition, then a good and uniform cooling of the samples can be effected from below. In order to obtain optimal results from this cooling operation, the lower part of the tub can present a labyrinth arrangement through which the cooling agent can be led.

Finally, in order to further increase the cooling, the cooling air feed from above onto the samples can be switched in simultaneously with the lower bottom cooling. In this manner, by units kept separately from the apparatus but easily insertable into the same, favorable conditions have been provided for bringing about the different climatic conditions and to make the basic apparatus of an especially simple construction.

Further details, features and advantages of the invention will be apparent upon consideration of the following description of the embodiment examples in conjunction with the annexed drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a schematic section through a testing apparatus for light- and weather-resisting properties taken along line I—I of FIG. **2**;

FIG. **2** is a schematic longitudinal section through the apparatus taken along line II—II of FIG. **1**;

FIG. **3** is another schematic longitudinal section through the apparatus taken along line III — III of FIG. **2**, and

FIG. **4** is a schematic partly cut open view of a sample tub with lower bottom cooling.

DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

The testing apparatus **10** for light- and weather-resisting properties as presented in a sectional view on FIG. **1**, consists essentially of a housing **12**, a lower part **16** provided with supports **14** on the four corners thereof, as well as a sample room **18**. This sample room **18** is formed by a reflector channel of parabolic section, being limited laterally by a rear side wall **20**, a front side wall **22** as well as by front walls **24**. The side walls **20** and **22** are made of an elastically ductile and simple stamped out sheet-metal, which adopts its parabolic shape by putting it against the parabolic contour of the front walls **24**. The rear side wall **20**, as well as the front walls **24**, are rigidly mounted on the housing but can be detached in case of replacement. The sheets do not join to present a complete parabolic shape but rather are intermittently configured in the range of the focal point. Within this area, i.e. in the focal line of the reflector channel, there is a gas discharge radiator **26**, being a xenon radiator in order to simulate a sunlight as realistic as possible.

The bottom of the sample room in the lower part **16**, except for a rectangular and projecting ridge **28**, is open-formed. In this opening, a tub **32** lodging samples **30** is arranged in such a manner that a collar **34** of this tub is supported by the ridge **28**.

Mirrors are arranged around the xenon radiator **26**, whereby the mirror **36** being arranged between the radiator **26** and the samples **30**, which selectively reflects the infrared portion of the radiation and is permeable to the visible as well as the ultraviolet portions of the radiation, is configured like a third of a tube in such a manner that its extremities join the upper edges of the side walls **20** and **22**. On the side of the xenon radiator **26** not facing the samples, a mirror **38** is arranged in form of a roof, and that in such a manner that the mirror **38** is tangent to the imaginary elongation of the parabola. The ultraviolet portions of the radiation, reflected by the mirror **38** or, respectively, by the side walls **20** and **22** configured as reflectors, are indicated by the arrows **40**. This portion of the radiation immediately hits the samples **30**. The infrared portion of the radiation, which directly passes through the mirror **38** or, respectively, is reflected by the mirror **36**, is indicated by the arrows **42** and upwards reaches the open air. Perpendicularly arranged sheets **44** do not obstruct