CLAIMS

1. A coupling device for a towing vehicle with an object detection means (10) attached to the coupling device, wherein the coupling device has a coupling body (30) in form of a fifth wheel plate (40) and a locking mechanism (31), with which a coupling means (50) in form of a kingpin (51) is releasably held on the coupling body (30) in its end position (E), wherein the coupling body (30) comprises an available space (33) which is limited by a coupling means guiding contour (32) and extends along a longitudinal axis (x), wherein the coupling means (50) is at least partially immersed during coupling into the available space (33) until reaching an end position (E),
characterized in that,
the object detection means (10) is a camera and the camera is mounted in the coupling means guiding contour (32) so that it can move between a functional position (11) protruding into the available space (33) and a dodged position (12) sunk into the coupling means guiding contour (32).

2. The coupling device according to claim 1, **characterized in that** in the lowered dodged position (12) the object detection means (10) is moved back at least so far that the object detection means (10) terminates with the adjacent section of the coupling means guiding contour (32).

3. The coupling device according to claim 1 or 2, **characterized in that** the object detection means (10) is mounted by means of a spring element (20) along an active axis (21).

4. The coupling device according to one of claims 1 to 3, **characterized in that** the object detection means (10) is mounted by means of a spring element (20) and/or a lever (22) about one or more axis of rotation(s) (23).

5. The coupling device according to claim 1 or 2, **characterized in that** the object detection means (10) can be moved by means of an actuator (24).

6. The coupling device according to claim 5, **characterized in that** the actuator (24) is connected to at least one proximity sensor (25a, 25b, 25c).

7. The coupling device according to claim 6, **characterized in that** the proximity sensor (25a, 25b, 25c) is formed from the object detection means (10).

8. The coupling device according to one of claims 1 to 7, **characterized in that** the fifth wheel plate (40) in the region of the end position (E) of the kingpin (51) comprises a C-shaped bearing area (41) which is partially enclosing the kingpin (51) in the circumferential direction, wherein the coupling means guiding contour (32) is formed from the C-shaped bearing area (41).

9. The coupling device according to one of claims 1 to 7, **characterized in that** the fifth wheel plate (40) comprises two coupling horns (43) delimiting an entrance opening (42) in the rearward direction (R), wherein the coupling means guiding contour (32) is formed from flanks (44) of the coupling horns (43) which are facing one another.

10. The coupling device according to one of claims 1 to 7, **characterized in that** the fifth wheel plate (40) has a cross bridge (45) arranged under an entrance opening (42) in the rearward direction (R), wherein the coupling means guiding contour (32) is formed from the transverse bridge (45).

11. The coupling device according to one of claims 1 to 7, **characterized in that** the fifth wheel plate (40) in the rearward direction (R) has a connector console (46) of a line coupling system, wherein the coupling means guiding contour (32) is formed from the connector console (46).

12. The coupling device according to one of claims 1 to 11, **characterized in that** the object detection means (10) is mounted pivotably with respect to the coupling device about a transverse axis (y) oriented transversely to the longitudinal axis (x).

13. The coupling device according to claim 12, **characterized in that** the object detection means (10) can be actively positioned about the transverse axis (y) by means of a servomotor (26).