

CLAIMS

1. An adjustable lampshade-type reflector comprising:
a main frame having opposing first and second length-sides and opposing first and second width-sides;
5 first and second reflective boards pivotably coupled to the main frame at the first and second width-sides of the main frame, respectively; and
third and fourth reflective boards pivotably coupled to the main frame at the first and second length-sides of the main frame, respectively;
wherein a distance between respective pivot axes of the first and second reflective boards is
10 adjustable for adjusting a reflective region of the adjustable lampshade-type reflector.
2. The adjustable lampshade-type reflector of claim 1, wherein each of the first, second, third and fourth reflective boards is coupled to one or more manual actuators of the adjustable lampshade-type reflector for adjusting respective angles between the first, second, third and fourth reflective boards and a plane of the main frame.
- 15 3. The adjustable lampshade-type reflector of claim 2, wherein each manual actuator comprises a rope coupled to one of the first, second, third and fourth reflective boards. The rope may be made from nylon.
4. The adjustable lampshade-type reflector of any one of the preceding claims, comprising a first rack coupled to the first reflective board and the main frame.
- 20 5. The adjustable lampshade-type reflector of claim 4, wherein the first rack is received in tracks of the main frame extending along the first and second length-sides of the main frame, respectively.
6. The adjustable lampshade-type reflector of claims 4 or 5, wherein the first reflective board is coupled to the main frame via one or more first hinges connected to the first rack.
- 25 7. The adjustable lampshade-type reflector of any one of claim 4 to 6, wherein the first reflective board is substantially seamlessly coupled to the first rack at the pivot axis.
8. The adjustable lampshade-type reflector of any one of the preceding claims, comprising a second rack coupled to the second reflective board and the main frame.
9. The adjustable lampshade-type reflector of claim 8, wherein the second rack is received
30 in tracks of the main frame extending along the first and second length-sides of the main frame, respectively.
10. The adjustable lampshade-type reflector of claims 8 or 9, wherein the second reflective board is coupled to the main frame via one or more second hinges connected to the second rack.

11. The adjustable lampshade-type reflector of any one of claims 8 to 10, wherein the second reflective board is substantially seamlessly coupled to the first rack at the pivot axis.
12. The adjustable lampshade-type reflector of any one of the preceding claims, wherein the third and fourth reflective boards are preferably substantially seamlessly coupled to the main frame at the respective pivot axes.
13. The adjustable lampshade-type reflector of any one of the preceding claims, wherein each of the first, second, third and fourth reflective boards may be made from a high-reflectance-material such as bright anodized aluminum.
14. The adjustable lampshade-type reflector of any one of the preceding claims, comprising at least six mounting legs on the main frame for firmly attaching the adjustable lampshade-type reflector to an upper shelf of an indoor farm rack.
15. The adjustable lampshade-type reflector of any one of the preceding claims, wherein the rotational axes of the first, second, third and fourth reflective boards preferably define a rectangle at various different distances between the respective pivot axes of the first and second reflective boards, so as to provide gaps between edges of the first, second, third and fourth reflective boards when off-vertically oriented.
16. A method of illuminating an indoor farm rack using the adjustable lampshade-type reflector of any one of the preceding claims.