

| Solutions to Subproblem of Accepting Feedwater                                                                     | Solutions to Subproblem of Converting Solar Energy to Heat                                     | Solutions to Subproblem of Heat Exchanger                                                      | Solutions to Subproblem of Flow / Temperature Regulation                                                   | Solutions to Subproblem of Minimizing Heat Loss                                             | Solutions to Subproblem of Releasing Trapped Air                                                 | Solutions to Subproblem of Sediment Control                                                                                        |
|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Screened Hopper</li> </ul>                                                | <ul style="list-style-type: none"> <li>• Glazed glass</li> </ul>                               | <ul style="list-style-type: none"> <li>• Filter</li> </ul>                                     | <ul style="list-style-type: none"> <li>• Dimpled surface</li> </ul>                                        | <ul style="list-style-type: none"> <li>• Interior Insulation</li> </ul>                     | <ul style="list-style-type: none"> <li>• Air lock mechanism</li> </ul>                           | <ul style="list-style-type: none"> <li>• Filter</li> </ul>                                                                         |
| <ul style="list-style-type: none"> <li>• Plastic syphon</li> </ul>                                                 | <ul style="list-style-type: none"> <li>• Double glazed glass</li> </ul>                        | <ul style="list-style-type: none"> <li>• Fine meshed screen (at inlet)</li> </ul>              | <ul style="list-style-type: none"> <li>• Single / Multiple thermostat valves</li> </ul>                    | <ul style="list-style-type: none"> <li>• Exterior Insulation (insulating jacket)</li> </ul> | <ul style="list-style-type: none"> <li>• Sightglass w/ manually operated poppet valve</li> </ul> | <ul style="list-style-type: none"> <li>• Fine meshed screen (at inlet)</li> </ul>                                                  |
| <ul style="list-style-type: none"> <li>• Screened Trough</li> </ul>                                                | <ul style="list-style-type: none"> <li>• Coated glass</li> </ul>                               | <ul style="list-style-type: none"> <li>• Tube within a tube</li> </ul>                         | <ul style="list-style-type: none"> <li>• Natural circulation</li> </ul>                                    | <ul style="list-style-type: none"> <li>• Thermal mass (brick)</li> </ul>                    | <ul style="list-style-type: none"> <li>• Floating air valve</li> </ul>                           | <ul style="list-style-type: none"> <li>• Sedimentation trough (w/ header on side to allow sediment to settle on bottom)</li> </ul> |
| <ul style="list-style-type: none"> <li>• Sedimentation Trough</li> </ul>                                           | <ul style="list-style-type: none"> <li>• Bubble-wrap</li> </ul>                                | <ul style="list-style-type: none"> <li>• Two fluid system w/ rotary shaft actuation</li> </ul> | <ul style="list-style-type: none"> <li>• Bimetallic strip</li> </ul>                                       |                                                                                             | <ul style="list-style-type: none"> <li>• Deaerator</li> </ul>                                    | <ul style="list-style-type: none"> <li>• Gelatin-like material w/ sticky surface</li> </ul>                                        |
| <ul style="list-style-type: none"> <li>• Bucket w/ dowel pins and spring loaded drain valve</li> </ul>             | <ul style="list-style-type: none"> <li>• Two pieces of plastic with air in b/w</li> </ul>      | <ul style="list-style-type: none"> <li>• Baffled shell</li> </ul>                              | <ul style="list-style-type: none"> <li>• Dual expanding metal plates (expands to expose hole)</li> </ul>   |                                                                                             |                                                                                                  |                                                                                                                                    |
| <ul style="list-style-type: none"> <li>• Bucket (manual feed)</li> </ul>                                           | <ul style="list-style-type: none"> <li>• Two corrugated plates w/ selective surface</li> </ul> | <ul style="list-style-type: none"> <li>• Counter flow pipes</li> </ul>                         | <ul style="list-style-type: none"> <li>• Differential Pressure control valve</li> </ul>                    |                                                                                             |                                                                                                  |                                                                                                                                    |
| <ul style="list-style-type: none"> <li>• Screened bucket</li> </ul>                                                | <ul style="list-style-type: none"> <li>• Glass-air-collector</li> </ul>                        | <ul style="list-style-type: none"> <li>• Compact heat exchanger</li> </ul>                     | <ul style="list-style-type: none"> <li>• Thermostatic mixing valve (requires constant flowrate)</li> </ul> |                                                                                             |                                                                                                  |                                                                                                                                    |
| <ul style="list-style-type: none"> <li>• Lid</li> </ul>                                                            | <ul style="list-style-type: none"> <li>• Glass-greenhouse gas-collector</li> </ul>             | <ul style="list-style-type: none"> <li>• Count flow plates</li> </ul>                          |                                                                                                            |                                                                                             |                                                                                                  |                                                                                                                                    |
| <ul style="list-style-type: none"> <li>• Selective surface lidded container</li> </ul>                             | <ul style="list-style-type: none"> <li>• Dimpled-flat-dimpled assembly</li> </ul>              | <ul style="list-style-type: none"> <li>• Evacuated tube collector</li> </ul>                   |                                                                                                            |                                                                                             |                                                                                                  |                                                                                                                                    |
| <ul style="list-style-type: none"> <li>• Funnel with coffee filter</li> </ul>                                      | <ul style="list-style-type: none"> <li>• Mirrors focusing light to center</li> </ul>           |                                                                                                |                                                                                                            |                                                                                             |                                                                                                  |                                                                                                                                    |
| <ul style="list-style-type: none"> <li>• Funnel with two stage filter and lid</li> </ul>                           | <ul style="list-style-type: none"> <li>• Selective surface</li> </ul>                          |                                                                                                |                                                                                                            |                                                                                             |                                                                                                  |                                                                                                                                    |
| <ul style="list-style-type: none"> <li>• Header w/ single threaded inlet to attach to existing pipeline</li> </ul> |                                                                                                |                                                                                                |                                                                                                            |                                                                                             |                                                                                                  |                                                                                                                                    |