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- 5. A method for making a balloon catheter comprising:  
 providing a balloon cylinder, the balloon cylinder having a  
 first end and a second end, the first end and the second  
 end separated by a longitudinal length;  
 providing a catheter comprising at least one shaft;  
 incorporating at least one fold, the at least one fold extend-  
 ing from the first end to the second end of the balloon  
 cylinder; and  
 welding the balloon cylinder with the at least one fold to the  
 at least one shaft of the catheter.
- 6. The method of claim 5, wherein a laser is used to weld  
 the balloon cylinder to the catheter.
- 7. The method of claim 5, the at least one fold being a  
 plurality of folds, each of the plurality of folds having a first  
 end and a second end, radially adjacent ends being overlap-  
 ping.
- 8. The method of claim 5, the at least one fold being a  
 plurality of folds, the plurality of folds having even material  
 thickness.
- 9. The method of claim 5, wherein the balloon cylinder is  
 disposed about the at least one shaft when incorporating the at  
 least one fold.
- 10. The method of claim 9, further comprising providing a  
 mandrel, the balloon cylinder being disposed about the at  
 least one shaft which is disposed about the mandrel when  
 incorporating the at least one fold.
- 11. The method of claim 10, wherein the balloon cylinder  
 is disposed about the at least one shaft which is disposed

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- about the mandrel when the balloon cylinder is welded to the  
 at least one shaft of the catheter.
- 12. The method of claim 5, further comprising providing a  
 mandrel, the balloon cylinder being disposed about the man-  
 drel while incorporating the at least one fold.
- 13. The method of claim 12, further comprising removing  
 the mandrel from within the balloon cylinder with at least one  
 fold before welding the balloon cylinder with at least one fold  
 to the at least one shaft.
- 14. The method of claim 5, further comprising  
 providing at least one section of heat shrink material;  
 disposing the at least one section of heat shrink material  
 about at least a portion of the balloon cylinder; and  
 pre-shrinking the section of heat shrink material.
- 15. The method of claim 14, the at least one section of heat  
 material having a length at least equal to the longitudinal  
 length of the balloon cylinder.
- 16. The method of claim 14, the at least one section of heat  
 shrink material comprising a first section and a second sec-  
 tion, the balloon cylinder comprising a first weld region and a  
 second weld region, the first section of heat shrink material  
 being disposed about the first weld region and the second  
 section of heat shrink material being disposed about the sec-  
 ond weld region.
- 17. The method of claim 14, wherein pre-shrinking the  
 section of heat shrink material presses the balloon cylinder  
 onto the at least one shaft of the catheter.

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