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# NOVEL CARDIAC CATHETER

Tech ID: 22925 / UC Case 2013-021-0

## BACKGROUND

Cardiac catheterization, angioplasty, and related catheter-based interventions are known as the most significant discoveries made in cardiovascular medicine. Currently, >700,000 cardiac catheterizations and >600,000 percutaneous coronary interventions (PCI) are performed annually in the United States. Such techniques have evolved over the past century, providing researchers and physicians a better understanding of basic cardiovascular biology and have enabled accurate diagnoses, effective treatments of major cardiac diseases.

Cardiac catheterization is a fundamental medical procedure used to diagnose and treat cardiovascular disease, including heart attack and stroke, the number one killer of men and women in the United States. Cardiac catheterization is a technically difficult procedure, requiring the skills of experienced medical physicians. Physicians are often faced with anatomical challenges, making it difficult to successfully execute cardiac catheterizations. In order to successfully complete the procedure, the equipment must traverse tortuous arteries and anatomical anomalies in order to reach the heart (e.g. tortuous subclavian arteries in trans-radial cardiac catheterization; tortuous iliac arteries in trans-femoral cardiac catheterization). Thus, there is a significant need for improved catheter design that overcomes such challenges without compromising medical benefit.

## TECHNOLOGY DESCRIPTION

UCSF inventors have designed a catheter that will circumvent the problems posed by tortuous anatomy and anomalous anatomy that may hinder successful and efficient completion of cardiac catheterization procedures used to diagnose and treat CVD.

## APPLICATIONS

- Cardiac catheterization (trans-radial and trans-femoral)

## ADVANTAGES

- ▶ Ease of design can be manufactured into every cardiac catheter
- ▶ Faster, more efficient catheterization procedure
- ▶ Facilitates treatment and diagnosis of more patients
- ▶ Less damage to arteries and surrounding tissues, shortening recovery time
- ▶ Easier for physicians to manipulate
- ▶ Affords a market advantage particularly in trans-radial procedures

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### OTHER INFORMATION

#### KEYWORDS

cardiac catheterization

#### CATEGORIZED AS

- ▶ Medical
- ▶ Devices

#### RELATED CASES

2013-021-0

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	10,675,437	06/09/2020	2013-021

PARTNERSHIP OPPORTUNITIES

University of California, San Francisco seeks to develop and commercialize by an exclusive or non-exclusive license agreement and/or sponsored research with a company active in the area.

PATENT INFORMATION

Worldwide patent rights are available

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