



# Fluoride Treatment for Orthodontic Patients (20130331)

**IP Status:** Issued US Patent; **Application #:** 14/633,902

## Localized Fluoride Treatment Device for Patients with Braces

A dental hygiene system for orthodontic patients to provide fluoride to areas of teeth normally blocked by braces has been developed. The system is made of a plastic clip that attaches to the brackets and provides localized fluoride treatment for the teeth in areas that are hard to reach with conventional cleaning techniques. The device is easy, convenient, and provides eight weeks of tooth protection before being easily detached and replaced. This technology is the first of its kind and is a revolutionary step in dental hygiene and maintenance for orthodontic patients.

MN-IP Try and Buy	
<b>Try</b>	<ul style="list-style-type: none"> <li>• Trial period up to 6 months</li> <li>• \$5000/6 months</li> <li>• Fee waived if MN operating company or if sponsoring \$50,000+ in research</li> </ul>
<b>Buy</b>	<ul style="list-style-type: none"> <li>• Exclusive license for a \$25,000 conversion payment</li> <li>• 3% royalty after \$1 million in product sales. 2% for MN companies</li> </ul>

## Fluoride Protects Against Dental Demineralization

Fluoride can protect teeth from the effects of demineralization that occur when the enamel coating is damaged or wears away after coming into frequent contact with acids naturally occurring in food and drinks. It can often remineralize teeth that have been damaged by strengthening the outer layer. This fluoride interaction normally occurs during tooth brushing, when the fluoride in toothpaste comes into direct contact with the teeth. However, for patients with fixed orthodontic braces, reaching behind wires and near brackets to brush the teeth is difficult, leading to increased demineralization and decay in those areas. There is currently no device that is able to easily clean and protect the areas of teeth near braces.

### BENEFITS AND FEATURES OF ORTHODONTIA FLUORIDE DEVICE:

- Attaches conveniently to braces and provides fluoride to the difficult to reach tooth areas
- Provides protection from tooth demineralization for eight weeks
- Represents a completely new dental hygiene product

**Phase of Development** Proof of Concept

**Researchers:** Nathaniel Phillips, Katherine Lorentz, Sam Schmitz, James Sieracki, Nathan Lockwood

**Technology ID**

20130331

**Category**

Life Sciences/Medical Devices

**Learn more**

