



Ministry of Justice Israel Patent Office	Search Strategy (ISA/IL)
PCT Application Number: PCT/US2020/030847	
Examiner name: Liya Orenshtein	Completion Date: 17 August 2020

Search Details		
Search Description	Status	Comments
Search restricted by date	<input checked="" type="checkbox"/> None	
Documents cited in the application	<input type="checkbox"/> Considered <input checked="" type="checkbox"/> Not applicable	
Applications/publications of the same applicant(s)/inventor(s)	<input checked="" type="checkbox"/> Searched	
Earlier search results	<input type="checkbox"/> Considered <input checked="" type="checkbox"/> Not applicable	

AI-based patent search
<input type="checkbox"/> An AI-based search was carried out based on the full text (title, abstract, claims, description)

Database 1 (Patents):			
<input type="checkbox"/> Derwent Innovation	<input checked="" type="checkbox"/> Orbit (FamPat)	<input type="checkbox"/> PatBase	<input type="checkbox"/> STN – Patent Collection
<input type="checkbox"/> PATENTSCOPE	<input checked="" type="checkbox"/> Espacenet	<input checked="" type="checkbox"/> Google Patents	<input type="checkbox"/> Other:
Query: pbs biotech inc (macrocarrier) (cell culture) (opposed faces) (vertical bump) (hemispherical) (prevent contact) (macrocarrier) (cell culture) ((opposed)or (concave) or (bump)) (macrocarrier) ((opposed)or (concave) or (bump)) (macrocarrier) (opposed) (macrocarrier) and culture and (opposed) and (concave or bump or hemispheric) (macrocarrier) and culture and (two) and (concave or bump or hemispheric) (macrocarrier) and culture and (concave or bump or hemispheric) macrocarrier and culture and (two or opposit*) macrocarrier and culture and (two d part) macrocarrier and cell and (two d part) macrocarrier and cell and two macrocarrier and (two or opposite) and (plates or surface or disc) and culture and bump and stacking macrocarrier and (two or opposite) and (plates or surface or disc) and culture and bump macrocarrier and (two or opposite) and (plates or surface or disc) and culture *carrier and (two or opposite) and (plates or surface or disc) and culture			



*carrier and (two or opposite) and (plates or surface or disc) and culture and bump and stacking
 carrier and (two or opposite) and (plates or surface or disc) and culture and bump and stack
 *carrier and (two or opposite) and (plates or surface or disc) and culture and bump
 *carrier and (two or opposite) and (plates or surface or disc) and culture and bump and contact
 *carrier and (opposite) and (plates or surface or disc) and culture and bump and contact
 *carrier and (opposite) and (plates or surface or disc) and culture and bump and bioreactor
 *carrier and (opposite) and (plates or surface or disc) and bioreactor
 *carrier and (opposite) and (plates or surface or disc) and bioreactor and (prevent d (clump or contact))
 *carrier and (opposite) and (plates or surface or disc) and bioreactor and (clump or contact)
 (opposite) and (plates or surface or disc) and bioreactor and (clump or contact) and prevent
 (opposite) and (plates or surface or disc) and bioreactor and (clump or contact) and prevent and culture
 (opposite) and (plates or surface or disc) and bioreactor and (clump or contact) and prevent and culture and (central d bump)
 (plates or surface or disc) and cell and prevent and culture
 ((plates or surface or disc) d opposit) and cell and prevent and culture
 (plate or surface) and culture and curvat*
 (plate or surface) and culture and curvat* and cell
 (plate or surface) and culture and curvat* and cell and (two-sided or opposite)
 (plate or surface) and culture and curvat* and cell and (two-sided or opposite) and *carrier
 (plate or surface) and culture and concave and cell and (two-sided or opposite) and (extention or wing or protrusion)

Database 2 (Non-Patent Literature):			
<input type="checkbox"/> STN-NPL	<input type="checkbox"/> Orbit-NPL	<input type="checkbox"/> PatBase-NPL	<input type="checkbox"/> IEEE
<input checked="" type="checkbox"/> Google Scholar	<input type="checkbox"/> Technical Disclosure Commons	<input type="checkbox"/> Other:	
<p>Query: macrocarrier cell culture opposed faces macrocarrier vertical bump prevent contact culture carrier prevent clumps culture carrier wing extension pbs biotech inc macrocarriers bioreactor pbs biotech inc pbs biotech inc dual macrocarriers macrocarrier cell culture curvature</p>			

ILPO Guideline 50.22, Form No. 1, Edition No. 1